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REVIEW OF
EDUCATION IN INDIA
(1947-1961)

**MINISTRY OF SCIENTIFIC RESEARCH
AND CULTURAL AFFAIRS**

NATIONAL COUNCIL OF
EDUCATIONAL RESEARCH AND TRAINING
MINISTRY OF EDUCATION

1961

REVIEW OF EDUCATION IN INDIA

1947-1961

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MINISTRY OF SCIENTIFIC RESEARCH AND CULTURAL AFFAIRS

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247

PRINTED IN INDIA BY THE MANAGER
GOVT OF INDIA PRESS NASIK ROAD 1962

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MINISTRY OF SCIENTIFIC RESEARCH AND CULTURAL AFFAIRS

SCIENTIFIC RESEARCH

HISTORY

Prior to World War I, and even several years after, scientific research in India had not attracted the attention it deserved. The need for a strong and well-staffed central research institute was brought to the fore by the outbreak of World War II in September 1939. Many sources of supply of finished products were either entirely stopped or much curtailed, and it was soon realised that if India was to be industrially self-sufficient and an effective source of war supplies, the establishment of a central research organisation was essential. It was, therefore, decided to create the Board of Scientific and Industrial Research that came into existence in 1940.

By 1941, the activities of the Board had reached a stage when it became necessary to direct attention to the commercial utilisation of the results of research. The Government decided in 1942 to create a fund called the Industrial Research Fund for the purpose of fostering industrial development in the country and the Council of Scientific and Industrial Research was constituted as an autonomous body to administer the Fund. In June 1948, a separate Department of Scientific Research was created and the Council was placed under the administrative control of that Department. In January 1951, a separate full-fledged Ministry of Natural Resources and Scientific Research was set up and the scientific surveys that had been conducted earlier under the administrative control of other Ministries, were brought together to function under the new Ministry. The Survey of India, for instance, was transferred from the Ministry of Defence and the Botanical and Zoological Surveys of India from the Ministry of Agriculture to the new Ministry.

In April 1957, the Ministry of Natural Resources and Scientific Research was abolished and a separate Department of Scientific Research and Technical Education was created under a newly constituted Ministry of Education and Scientific Research. In May, 1958, the existing Ministry of Scientific Research and Cultural Affairs was created. The new Ministry is also responsible for technical education and cultural affairs.

RESEARCH UNDER THE C. S. I. R.

Research work under the Council of Scientific and Industrial Research is carried on in its own laboratories that are generally known as National Research Laboratories. Scientific research has made considerable progress since 1947. The pace of establishment was speeded up after independence and new laboratories were planned and built. With building construction, equipment of laboratories and recruitment of staff were taken in hand. Research work was started—in some cases, in buildings temporarily erected and in a few cases, in neighbouring laboratories which provided the facilities—the important consideration being that work should be taken up without delay or waiting for buildings to be completed.

The Council has at present under it the following 26 national research laboratories.

1. National Chemical Laboratory, Poona.
2. Central Food Technological Research Institute, Mysore.
3. Regional Research Laboratory, Hyderabad.
4. National Aeronautical Laboratory, Bangalore.
5. Central Indian Medicinal Plants Organisation, New Delhi.
6. National Physical Laboratory, New Delhi.
7. Central Road Research Institute, New Delhi.
8. Indian Institute of Biochemistry and Experimental Medicine, Calcutta.
9. National Metallurgical Laboratory, Jamshedpur.
10. Central Glass and Ceramic Research Institute, Calcutta.
11. Central Electrochemical Research Institute, Karaikudi.

12. Central Public Health Engineering Research Institute, Calcutta.
13. Central Fuel Research Institute, Jealgora.
14. Central Drug Research Institute, Lucknow.
15. Regional Research Laboratory, Assam.
16. National Botanical Garden, Lucknow.
17. Central Mining Research Station, Dhanbad.
18. Central Scientific Instruments Organisation, New Delhi.
19. Central Salt Research Institute, Bhavnagar.
20. Regional Research Laboratory, Jammu.
21. Central Building Research Institute, Roorkee.
22. Central Electronic Engineering Research Institute, Pilani.
23. Central Mechanical Engineering Research Institute, Durgapur.
24. Central Leather Research Institute, Madras.
25. Birla Industrial and Technological Museum, Calcutta.
26. Central Scientific Instruments Organisation, Delhi.

The names of the laboratories give a broad idea of the nature of subjects in which research is being conducted under the auspices of the Council. The programme of work in each laboratory is drawn up in consultation with industrialists and representatives of interested government departments and the laboratories provide facilities for team work and pilot plan investigations.

Technical aid is provided to industry in the form of advice, analytical and testing work and investigations relating to the assessment of raw materials etc. Contacts between research workers and technical personnel from industries are encouraged through symposia, conferences and discussions. Such contacts have proved mutually beneficial, and have helped to broaden the fields for research and development.

ASSISTANCE TO PRIVATE RESEARCH

Side by side with the work carried out in national research laboratories under the auspices of the Council, is the work conducted by private research institutes that are assisted financially. The major research organisations which receive substantial grants from the Ministry of S. R. and C. A. for their research work are the Indian Association for Cultivation of Science, Calcutta ; the Bose Institute, Calcutta and the Birbal Sahni Institute of Paleobotany, Lucknow. The National Institute of Sciences of India is also given financial assistance by the Government to enable it to promote research under its own schemes instituted at various research centres. Financial assistance is also given to a number of scientific societies and institutes for publishing scientific papers of importance and for holding seminars and symposia. Scholarships have been instituted with the help of grants given by the Government at various research institutions, both at national research laboratories and private research institutions.

The Government has also encouraged group discussions of scientists with a view to enabling them to exchange views and to link up the work being done by them. To this end, the Ministry recently organised two summer schools, one in Physics in 1959 and another in Botany in 1960. It is proposed to expand this activity and to hold four summer schools in 1961 in Anthropology, Chemistry, Physics and Zoology.

National Professorships have been instituted to enable outstanding scientists to continue their research work even after they reach the age of superannuation and retire from their appointments. Already, three National Research Professorships have been instituted in Physics.

The Ministry of S. R. and C. A. has also assisted Indian scientists to acquaint themselves with the most recent developments in various fields of science in other countries by becoming members of International Council of Scientific Unions, by sending Indian scientists abroad to attend international scientific conferences and by inviting foregin scientists of repute to annual congresses of Indian scientists. India participated in the International Geophysical Year and is planning to participate in the Indian Ocean Expedition organised by the International Council of Scientific Unions. The Government proposes to participate in the international space research activities under the auspices of the International Council of Scientific Unions.

In December 1953, the National Research Development Corporation was set up to stimulate the development of patents and inventions arising out of researches conducted in research institutions.

The Government is encouraging mountaineering expeditions by Indians by giving financial assistance. A grant of Rs. 50,000 was made for Chou Oyu expedition in 1958-59 and a similar grant of Rs. 6,46,185 for the Indian Mount Everest Expedition in 1959-60.

SCIENTIFIC POLICY RESOLUTION

The Scientific Policy Resolution of the Government is a re-statement of the policy pursued by the Government for the advancement of science and technology. With its emphasis on science education the Resolution recognises that the "dominant feature of the contemporary world is the intense cultivation of science on a large scale and its application to meet a country's requirements."

The Resolution was discussed at the Conference of Vice-Chancellors, leading educationists etc., in July 1958. This Conference made various recommendations to implement the Resolution and the recommendations are being processed in consultation with relevant Ministries of the Government of India, State Governments etc. A scheme of "Merit Promotions and Advance Increments" has been approved by the Government of India to give encouragement to scientific personnel working in various government departments. The scheme is applicable to scientific personnel working in the C. S. I. R., Defence Research and Development Organisation, the Indian Agricultural Research Institute and the Geological Survey of India. It is being extended to the Zoological Survey of India, Botanical Survey of India and the Department of Anthropology.

The University Grants Commission has adopted measures to encourage higher scientific education and research in Indian universities. A Pool has been created for the temporary placement of well-qualified Indian scientists and technologists returning from abroad. Twenty-five per cent of the vacancies in the Pool will be available for persons with outstanding record at the Indian universities. A committee has been set up to consider the establishment of a Central Institute of Scientific and Technical Information.

Central Board of Geophysics

The promotion of geophysical research under the direct control of the Central Board of Geophysics started only during the second Plan period.

An Oceanographic Research Wing was established in August 1958. This Wing carries on researches (a) in all the fundamental aspects of physical oceanography and (b) for bringing about improvements in the methods of observation and instrumentation. The study of the deposits of the continental shelf and eventually the exploration of the sea-bottom by gravity and seismic methods are also envisaged. Since its inception, the Oceanographic Research Wing has regularly collected data on temperature, density and salinity in the coastal waters of Cochin.

At the instance of the Central Board of Geophysics, the Central Marine Fisheries Research Station, Mandapam, has been implementing since 1953 a scheme of collection of surface sea water samples in cooperation with the Merchant Navy, and others along the routes of their vessels plying in the Bay of Bengal, the Arabian Sea, etc. The collected samples are analysed for their chemical constituents.

A Geophysical Research Wing is being established to carry on researches in the methods of geophysical prospecting and for improving field techniques as applied to the exploration for oil, minerals, ground-water, etc., geophysical instrumentation and interpretation of geophysical data.

During the third Plan period, the work in all the three schemes is proposed to be stepped up. In particular, an intensive survey of the Indian seas and collection of additional fundamental data relating to temperature, salinity, water masses, etc., is proposed to be undertaken.

Indian Scientific Liaison Office, London

The Indian Scientific Liaison Office, London, established in 1948, collects information regarding scientific research in the various research institutions, universities and industries in the various European countries and sends it in the shape of weekly science newsletters, bulletins and publications from abroad for circulation in India among various universities, research institutions, etc.

VIJNAN MANDIR SCHEME

A scheme for the establishment of a chain of rural scientific centres known as "Vijnan Mandirs" was initiated by the C.S.I.R. in 1953. In 1955, the responsibility for the administration of the scheme was transferred to the Government of India. So far, 38 *Vijnan Mandirs* have been set up in selected rural areas covered by community development blocks.

The objective of the scheme is to educate the rural population in the methods of science and to make them familiar with the scientific principles involved in their day-to-day life. The Vijnan Mandir Museum contains specimens of local flora and fauna, minerals, rocks and such other materials as are available in villages. Through the agency of *Vijnan Mandirs,* rural science clubs are organised to serve as a means for dissemination of scientific information amongst the rural population. In order to create an interest in scientific matters and also to locate scientific talents in the countryside, various competitions are organised under the auspices of *Vijnan Mandirs* every year.

The *Vijnan Mandir* scheme is an attempt to carry elementary scientific knowledge to the people in rural areas who have been denied the benefits of formal education. Even though the scheme was initiated in 1953, many *Vijnan Mandirs* are still in the process of being set up. By working in close collaboration with community development programmes, it is hoped that these centres will help in developing a scientific outlook in the people and promoting amongst them the knowledge of what science can contribute to the practical tasks of daily life.

SURVEY OF INDIA

The Survey of India, one of the oldest departments of the Central Government, has carried out research in a number of fields.

In the field of Geodesy, the shape of the earth and the best fit of spheriod to suit our country was determined and a network of geodetic framework and mean sea levels was established. Investigations into the effects of atmospheric refraction on the measured angles, deviations of the plumb line, fluctuations of the mean sea level etc., were carried out *pari passu* with productive work, and with the advancements made in science, technology and instrumentation work is being continued in studying these problems further.

In map drawing and printing, maps were originally prepared in one colour (black) only, and relief was shown by hachures or form-lines. In the course of years, methods of mapping have considerably improved and maps are printed in multi-colours and with contours at regular intervals.

Investigations regarding triangulation surveys, base line measurements, precision levelling, astronomical observations in connection with geodetic operations, gravity and magnetic anomalies, atmospheric refractions and its effect on observations, earth movements, figure, shape, crust and structure of the earth, analysis and predictions of tides and currents, development of improved and speedy computational techniques etc., as related to the geodetic and geophysical fields are carried out in the Geodetic and Research Branch. Results are published from time to time in the annual geodetic reports and in technical and departmental papers.

Surveying by photogrammetric machines was started in this Department during 1954. Experiments and research are being carried out to determine the most economical and efficient scales of photography for different scales of mapping contour intervals and for surveying high hills and inaccessible terrain, where paucity of control combined with high relief present a problem for accurate surveying.

Experiments to depict larger sandy forest and low grass areas by the preparation and use of master negatives are in hand with a view to economising on the costs in drawing such symbols and improving the finish of the map detail.

Developments have been made in the process of (i) renovation of fogged photographic plates and films, (ii) preparation of negative making without the use of cameras from monochrome or colour originals and (iii) photographing line and half tone combined originals.

Experiments and further research in this field are still continuing.

NATIONAL ATLAS ORGANISATION

The need to compile a comprehensive National Atlas of India was long felt, but not undertaken till after independence. In 1953-54, the scheme of preparing the National Atlas of India was worked out and included under the second Five Year Plan, beginning in 1956.

A preliminary Hindi edition of the National Atlas of India published by the National Atlas Organisation in 1957, has already been acclaimed internationally as an "outstanding Atlas". Containing about 103 maps and insets printed on 26 multi-coloured plates, this Atlas gives for the first time an authentic and integrated picture of the country's physical features, economic resources, demographic problems and social conditions. The Organisation is currently engaged in preparing the main edition of the Atlas in English containing as many as 200 plates, mostly on 1:1 million scale, depicting every possible aspect of India's land and people. The Atlas is proposed to be issued in five volumes, comprising 12 separate fascicules.

Of the 200 maps to be included in the English Atlas, final drawing is expected to be completed for about 50 maps during the second Plan period ; the remaining 150 will be taken up during the third Plan period. Besides the continuation of the second Plan scheme of completing the National Atlas, the third Plan programme of the Organisation envisages the working of six new schemes, *viz.,* (1) Regional Delineation Scheme, (ii) Cartographic Training Scheme, (iii) Map Reproduction Research Scheme, (iv) Geomorphological Survey Scheme, (v) Research Publications Scheme, and (vi) Land Use and Land Capability Survey Scheme.

BOTANICAL SURVEY OF INDIA

The Botanical Survey of India, established in 1890, has served a real need.

In 1947, the Botanical Survey of India consisted only of the Industrial Section, Indian Museum and the Systematic Division, and Indian Botanical Gardens, Sibpore, Howrah.

Towards the close of 1954, the Survey assumed greater responsibilities in making available to a much wider circle of botanists, university students and scientific workers, material information on the flora and vegetation of the Indian Union through intensive exploration of the hitherto unexplored and under-explored areas.

In addition to the exploration work, the Botanical Survey of India undertakes intensive investigations in Cytotaxonomy, Cytogenetics, Physiology, Economic Botany including Ethno-Botany, Ecology of Plants.

For field work and other scientific work, this Department is divided into the following sections:

(1) A "Headquarter establishment" under the Chief Botanist at Calcutta to control and co-ordinate the activities of the different sections of the Department.

(2) A "Central Botanical Laboratory" at Allahabad for intensive investigation on cytotaxonomical, genetical, physiological, ecological and related subjects and for study on the effects of radio-isotopes on living plants.

(3) "Industrial Section" for the maintenance of galleries of economic plants of India and of a botanical museum on modern lines in Calcutta with fully representative collection of authentic plant specimens and investigation of plant resources, supply of economic and scientific information, visual education and museum services and training in museum methods.

(4) A National Herbarium at Calcutta for housing type specimens and fully representative collection of plants comprising the flora of India (and also of other countries). This wing of the Survey also helps in floristic work, taxonomy, systematic nomenclature and training in modern herbarium.

(5) Four regional circles at Shillong, Poona, Dehra Dun and Coimbatore to explore and map accurately the flora and vegetation of the respective regions, collection of specimens and data in respect of ecological groups and economic plants at regular intervals and during different seasons of the year to bring them up-to-date and revise the flora of the country and collection of fruits, seeds and other representative parts

of plants in their natural surroundings, for experimental cultivation and introduction, etc.

The Botanical Survey of India is collaborating with universities and similar institutions in the country by giving facilities to research students for the study of problems relating to the flora of India by giving practical instruction to students on the collection and processing of herbarium specimens and by associating research students with the exploration parties of the Survey.

Zoological Survey of India

The Zoological Survey was started in 1916 and its functions are

to act as the guardian of the National Zoological Collection;

to identify zoological specimens for government departments and other institutions and individuals;

to obtain the fullest possible information about the systematic and geographical zoology of India;

the Director, Zoological Survey of India, to act as the Zoological Adviser to the Government of India;

to publish zoological journals, monographs and books;

to look after and maintain the six public zoological galleries of the Indian Museum, Calcutta; and

to advise on matters regarding wild life. (The Director, Zoological Survey of India, acts as the Secretary General of the Indian Board for Wild Life).

The Survey has its headquarters at Calcutta and there are five regional stations at Shillong, Dehra Dun, Jodhpur, Jabalpur and Poona.

The history of some of the collections of the Zoological Survey may, in a way, be traced back to 1814, when the Asiatic Society of Bengal in Calcutta started making collections of Natural History material which formed the basis of the Indian Museum, founded in 1875. From 1907, Dr. N. Annandale, Superintendent of the Natural History Section of the Museum, initiated a series of extensive marine and other faunistic surveys culminating in the creation of the Zoological Survey of India as a Government of India department in

1916. A partial marine survey of Indian waters carried out by the Royal Indian Navy Ship "The Investigator", oceanographic researches on the denizens in the Indian seas carried out by Lt. Col. Seymour Sewell, a series of intensive faunistic surveys of Chilka Lake (Bay of Bengal), the faunistic surveys of the Salt Lakes near Calcutta, special investigations on shell fisheries in Andaman Islands, fish and fisheries, rodents and insects of sorts studied taxonomically, are some of the more important works undertaken by the Zoological Survey of India in the past.

Since independence, the Government of India have been anxious to expand and reorganise the Zoological Survey of India so as to enable it to play its legitimate role in developing the agricultural and industrial economy of the country and to occupy its rightful place among other Indian scientific research organisations. In December 1954, the expansion programme was taken in hand. Some of the features of expansion and reorganisation programme provided, among other things, for a Marine Survey Unit, an Animal Population Studies Unit and a Documentation Service Unit. New scientific sections of Protozoology, Arachnida, Amphibia and Protochordata have been established. Five regional stations have already been established and the sixth will be opened before March 1961. These stations will serve as centres for intensive faunistic surveys and for field and ecological studies of animals. Increased library, identification and advisory service, taxidermy and other facilities have been provided.

The developments envisaged under the third Plan relate chiefly to expansion of the existing scientific sections and divisions and the establishment of new divisions and sections like the Wild Life and Field Ecology Division, the Paleozoology Division, the Soil Zoology Section and the Publication Section. Additional field stations for studies on fresh water and higher altitude animals, etc., will also be established.

DEPARTMENT OF ANTHROPOLOGY

The Department of Anthropology was set up as an independent department in 1945 as it was felt that India would require expert anthropological guidance in integrating her 25 millions of tribal population into the socio-economic-political structure of the country. The Department of Anthropology was planned to cover all the important fields of anthropological and allied research. The Department has its headquarters in Calcutta, and four regional research stations at Shillong, Nagpur, Ootacamund and Port Blair.

The Department has two main Divisions—Cultural Anthropology and Physical Anthropology, each sub-divided into a number of research sections. Cultural Anthropology Division consists of the following sections.

(i) Social Anthropology (ii) Ethnography (iii) Social Psychology and (iv) Linguistics. Physical Anthropology Division consists of the sections of (i) Human Biology (ii) Comparative Morphology (iii) Somatology and (iv) Biochemistry.

Since 1945, advanced training in all branches of anthropology is imparted to post-graduate students contemplating a research career. So far, 28 students have completed their training, of whom 20 have been absorbed by the Department. Two foreign scientists of Italy and the U.S.A. have been offered facilities to conduct anthropological research in India.

As fundamental and applied researches in science nourish one another and neither can thrive without the other, this Department aims at conducting studies in both theoretical and applied anthropology. The results of such studies would help the administration and social welfare besides contributing to the development of anthropology as a science in its physical as well as cultural aspects. The Department studies not only the tribal groups but also other sectors of the population of India. It is proposed to continue the researches and to extend them on a larger scale to a larger number of tribal and other populations. Such an extended programme is most urgent in view of the fact that the tribes have been undergoing a rapid process of cultural change. Moreover, accurate knowledge about their cultural pattern is indispensable for their integration with the rest of the Indian population.

One of the major projects undertaken by the Department is to define culture-zones of India on the basis of a survey of selected material traits in all the 322 districts of India. Up to September 1961, 263 districts were covered, while the work is proceeding with respect to the remaining 59 districts. When all such information is assembled, distribution maps can be prepared for correlation with language maps or maps showing the distribution of physical types.

Another major project which has been taken up by the Department is a study of the rate of growth of different sections of the population. Reproductive life is being studied on a small but fairly intensive scale in some districts and among the Nicobarese.

Under the third Five Year Plan, the Department is considering the establishment of 20 fellowships of the value of Rs. 400 each per month, which will be distributed among various universities and research institutes. The scholars work in their respective institutions according to plans prepared by the Department.

TECHNICAL EDUCATION

Technical education has to respond continually to both socio-economic changes and scientific and technological advance. Although the first technical institution in India was established well over a century ago, technical education in India remained almost static for a long time. This condition is reflected in a large measure in the lack of scientific and technological progress of the country for many years. It was only when the World War II broke out that the need for technicians for the war effort was felt and some attention was paid to the problem of technical education and training.

An important outcome of war experiences was the formulation of post-war reconstruction plans in all fields. Two vital decisions taken by the Government at about this time exercised a far-reaching influence on the course of the development of technical education in India. One was the establishment of an All-India Council for Technical Education in 1946 to advise on all aspects of improvement and co-ordinated development of technical education. Another was the appointment of a Scientific Manpower Committee in 1947 to assess the requirements for various categories of scientific and technical personnel and recommend measures to meet them.

The All-India Council carried out a comprehensive survey of technical institutions in the country and formulated a scheme for their immediate improvement and development with financial assistance provided by the Central Government. It also set up Boards of Technical Studies in various fields to prepare courses of a suitable standard, and for various levels of training which could serve as a model for the institutions and facilitate reorganisation of technical education in the country. Four regional committees, one for each region of the country, were set up to survey regional needs, to formulate and implement development programmes in a co-ordinated manner and to help in the establishment of liaison between industry and technical institutions. The Council also initiated various other measures for the development of technical education.

The Scientific Manpower Committee carried out a quantitative and qualitative assessment of the requirements for technical personnel over a ten-year period, estimated existing shortages in training facilities and recommended various measures to meet the requirements. It also established the concept of integrated planning in technical education with a capacity to foresee future requirements for manpower and to meet them through organised effort. Thus, when India achieved independence in 1947, a certain awareness of the importance of technical education to national development was already there in many quarters. The first and second Five Year Plans accorded high priority to technical education and a large financial provision was made both at the Centre and in the States for the establishment of new institutions and for the development of the existing ones.

POSITION IN 1947

In 1947 when India became independent, there were in the country 38 institutions with a total admission capacity of 2,940 students per year for first degree courses. There were also 53 polytechnics with a total admission capacity of 3,670

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students per year for diploma courses. By 1959 the number of institutions for first degree courses had increased to 87 and of polytechnics of 166. The total admission capacity of the institutions had increased to 11,510 students for first degree courses and to 20,370 for diploma courses. The progressive expansion of training facilities over the years is shown below.

Year	Degree Courses			Diploma Courses		
	Number of institutions	Admission capacity	Output of graduates	Number of institutions	Admission capacity	Output of graduates
1947	38	2,940	1,270	53	3,670	1,440
1950	49	4,120	2,200	86	5,900	2,480
1951	53	4,790	2,690	89	6,220	2,630
1955	65	5,890	4,020	114	10,480	4,500
1959	87	11,510	4,480	166	21,370	7,240

Before 1947, there was hardly an institution which provided facilities for post-graduate studies and research in engineering. Indian students had to go abroad for advanced training. Today, over a dozen institutions are there in the country where facilities for post-graduate studies and research work are available for nearly 500 scholars. The fields of study also cover a wide range of subjects, such as Power Engineering, Dam Construction and Irrigation Engineering, Production Engineering, Advanced Electronics, Aeronautical Engineering. Such facilities will be expanded in the next five years so as to provide for about 2,000 scholars.

STRUCTURE OF TECHNICAL EDUCATION

Technical education in India is a four-tiered structure comprising post-graduate courses and research; first degree courses; diploma courses; and vocational or industrial training. Each tier is a self-contained stage intended to serve a specific purpose and neither the diploma courses nor the industrial training courses are a preparation for the next higher tier. For post-graduate courses and research, however, only those candidates who possess a first degree in the relevant subjects are admitted. The objective of the first degree courses is to train technologists, some of whom may eventually become designers, research engineers or specialists in various fields either after further studies at post-graduate level or experience in the profession. They are not concerned with preparing persons for specific positions or jobs in industry, but seek to give them a broad-based education in the scientific principles and methods underlying technology. They are not concerned either with developing particular technical skills in the students but serve to acquaint them with various productive methods in accordance with constructional requirements in a particular system that consists of an assembly of men, materials and machines.

These objectives are sought to be achieved through a formal course of theoretical and practical studies at an institution over several years. The duration of the course is generally four years with the Intermediate in Science as the minimum admission qualification. The Intermediate in Science, a preparatory stage for university course in science or technology, is of two years' duration after the high school education that extends over a period generally of ten years. A few technological institutions in the country, particularly in the western region have, however, prescribed a three-year (instead of four years) curriculum for the first degree course. It, therefore, takes five to six years for a student to complete the first degree after his high school education.

Secondary education in the country is in the process of reorganisation and the new pattern envisages an eleven-year schooling that prepares candidates for life and for direct entry to the university. The existing Intermediate course is being abolished. As a result of these changes, the first degree courses are being reorganised into a five-year integrated course after higher secondary education. The advantages of a five-year integrated course are four. First, a more fruitful integration of fundamental sciences, technological subjects and liberal arts will be possible. Second, a higher level of scientific and technical competence may be expected since the students can absorb the different subjects in more suitable stages and in right combinations. Third, a five-year tutelage will give the teachers sufficient scope for not rushing students with too much of class work and for developing in them a capacity for growth and maturity. Finally, in these days of specialisation, a five-year curriculum permits of an adequate introduction to the different specialised fields and prepares the students for post-graduate studies or research.

The first degrees are awarded in the main fields of Technology, Civil Engineering, Mechanical Engineering, Electrical Engineering, Electrical Communication Engineering, Chemical Engineering, Mining, Metallurgy, Textiles Technology, Agricultural Engineering, Leather Technology and Architecture. Courses in Instrument Technology, Automobile Engineering and Aeronautical Engineering are also offered by some institutions at the first degree or equivalent level.

Post-graduate courses leading to a Master's degree or equivalent award are generally of one or two years' duration and provide for specialisation in different branches of technology. A course generally includes formal instruction, project work and independent study of a chosen problem to be presented as a dissertation. Research degrees like the Ph.D. or D.Sc. are awarded on the basis of original research done by candidates at recognised centres.

Next to first degree courses, diploma courses occupy an important position in technical education in India. These courses are conducted by a large number of institutions called polytechnics and are designed to train technicians who will eventually occupy supervisory positions like foreman, overseer, etc., in industry and other technical organisations. Their duration is three years after high school education and they have a practical bias. A view has, however, been advanced in recent years that the practical knowledge and experience required by a technician cannot be given to him adequately in a course that is wholly institution-based, and that as such, the present three-year diploma course does not always produce the right type of personnel. The A.I.C.T.E. has, therefore, designed a sandwich course of four years in which practical training in industry and institutional studies alternate in suitable layers. The student spends stated periods in industry and in an educational institution throughout the course and fulfils the academic requirements for the diploma. He also gains the practical experience necessary for a supervisory position. The scheme has been introduced at selected centres in cooperation with industry. As training facilities in industry expand, the sandwich course will become an important feature of technical education in India.

The diploma courses are offered in the main fields of Civil, Mechanical and Electrical Engineering. A few institutions also offer Textile Technology, Leather Technology, Mining Engineering and other fields according to regional requirements for technical personnel at this level.

As a matter of established usage, the term "polytechnic" represents today in India technical institutions that conduct diploma courses chiefly in Civil, Mechanical and Electrical Engineering. It indicates at once both the standard of training and the main fields of study. Except for a few institutions that are under the direct control of universities, all polytechnics are affiliated to State Boards of Technical Education in different States. The State Boards prescribe the courses of study, conduct examinations and award diplomas. Uniformity of standards on an all-India basis is maintained through the All-India Council for Technical Education which has formulated national certificate courses to serve as a model for the diploma courses conducted at polytechnics.

An interesting feature of the pattern of technical education is the relative prominence of different fields of study, which is also an indication of the state of industrial development in the country. On the basis of 1959 admissions to degree and diploma courses, distribution of seats between the various fields of technology are given in the following table.

Fields	Number of Seats	
	Degree	Diploma
Civil Engineering	4,192	10,270
Mechanical Engineering	2,325	4,570
Electrical Engineering	2,329	4,580
Electrical Communication Engineering	375	240
Mining	290	455
Metallurgy	239	10
Chemical Engineering and Chemical Technology	485	..
Textile Technology	282	311
Architecture	285	..
Other Fields	975	930
	11,777	21,366

Civil Engineering accounts for nearly 37% of the total seats at the first degree level and nearly 50% at the diploma level. Next in order are Electrical and Mechanical Engineering that enjoy equal importance. This distribution is not accidental. It is the result of the development of the institutions over the past 50 years in accordance with the pattern of employment of technical personnel. Civil Engineering so far has constituted the largest field of activity in the country; and in terms of employment potential it has offered the largest scope for graduates and diploma-holders. Owing to the lack of industrial development, particularly in manufacturing industries, Mechanical Engineering, Electrical Engineering, Metallurgy and other branches have been rather restricted in so far as employment opportunities are concerned. In fact, in the recent past—less than ten years ago—there was a serious threat of unemployment among graduates who had qualified in these fields. The position however, is changing very rapidly, thanks to the Five Year Plans in which industrial development is emphasised. The future trend will be for larger numbers of mechanical, electrical, metallurgical, chemical and mining engineers as the industrial development of the country in heavy and light engineering, mining, power, fuel and chemical industries, etc., progresses. Such trends are already noticeable and a stage will be reached in the near future when the demand for civil engineers will stabilise itself at a level not very different from the existing provision of training facilities. The demand for other types of engineers will correspondingly increase. In order to meet the latter as it arises, diversification of courses of study in the existing as well as in the new institutions has to be planned well in advance and adequate provision created for training in various branches.

The Constitution directs the State to provide compulsory education for all children up to the age of 14 *i.e.*, up to three classes below the new higher secondary course that is in process of introduction. The question is, how to provide diversified opportunities for education and training to a majority of students after 14, for gainful occupation in life. A scheme has since been formulated for the establishment of junior technical schools which will offer a three-year integrated course of general education, elementary technical education and technical training in various engineering trades and prepare students to enter industry as skilled workers and operators. Some of the more promising students may enter polytechnics and complete the diploma course in about two years and enter the profession at a higher level.

Technical Institutions for Degree and Diploma Courses

Technical institutions functioning in the country for first degree and diploma courses are classified into government, non-government and university institutions depending upon whether they are financed, and managed by the Central or State Governments, private agencies and universities respectively. There are at present 100 institutions for first degree or equivalent courses and 196 institutions for diploma courses. Except for the higher technological institutes at Kharagpur, Bombay and Madras, the Indian Institute of Science, Bangalore and the Madras Institute of Technology, which are in a class by themselves, all first degree institutions are affiliated to universities and conduct courses as prescribed by them. The higher technological institutes and the Indian Institute of Science, Bangalore award their own degrees. The latter awarded till recently only diplomas and associateships that had been recognised by the Central Government and other authorities but since 1958 the Institute has been empowered to award conventional degrees. The Madras Institute of Technology awards diplomas for courses in Aeronautical Engineering, Instrument Technology, Automobile Engineering, Radio Engineering that are of first degree standard and the diplomas are recognised by the Central Government and other authorities.

Except for the higher technological institutes, practically all technical institutions had till recently a maximum admission capacity of about 120 students per year. As compared to institutions in other technologically advanced countries, our institutions were certainly small units. Perhaps in the past that could not have been helped. For one thing, the demand for engineers and technicians was restricted; for another, regional aspirations for technical institutions could only be fulfilled on the basis of smaller units more widely dispersed.

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Also, there was no central planning and co-ordination of technical education that could have laid down definite principles governing the size and scope of work of the institutions. In course of time however it was realised that large-sized institutions were necessary to meet the increasing demand for engineering and that such institutions should function at a national level. The higher technological institutes have therefore been planned for an admission capacity of 300—400 students per year (or a total student enrolment of 1500—2000) at the first degree level. A special scheme has been drawn up, and is in process of implementation, to expand the training capacity of selected existing institutions and develop them into larger units. The establishment of eight large-sized regional engineering colleges has also been planned, each capable of admitting 250 students per year. Some polytechnics capable of admitting up to 300 students per year have been sponsored by the Central Government.

In any scheme of organised development of technical education, super-imposition is necessary; institutions should be related to the needs of a rapid industrial growth. All legitimate demands for provision of technical education facilities require to be met irrespective of other considerations. The aim of the Central Government in this direction is two-fold. A total view of technical education is taken in relation to the Five Year Plans and at the same time no region or area is left without opportunities of advancement for its people. The establishment of higher technological institutions, and the other all-India institutions is planned so as to secure a wider geographical disposal of engineering colleges and polytechnics. The objective is that eventually every one of the districts in the country should have at least one polytechnic and no State is without its own engineering college.

An important feature of technical education in India is the important role played by private enterprise. Of the 296 institutions in the country for first degree and diploma courses, 177 have been established by the Central Government and State Governments, 31 by universities and 88 by private agencies. In quantitative terms, the institutions established by private agencies account for nearly 35% of the total number of seats. A definite policy is also followed by the Central Government to encourage and assist private agencies. Where a private agency by itself or in association with the State Government concerned raises enough funds to meet 50% of the non-recurring (building and equipment) and 50% of the recurring expenditure for a technical institution, the Central Government provides the balance of the amount required, as grant-in-aid. The Central Government also gives interest-free loans for the construction of hostels. As a result of this policy, seven engineering colleges and 20 polytechnics have been established by private agencies during the first four years of the second Plan period as against eight colleges and 37 polytechnics established by State Governments and universities. Private enterprise therefore constitutes an important factor in the growth of technical education in the country and supplements in a large measure the efforts of the State. In order to ensure that private institutions are run on the right lines and maintain suitable standards, governing bodies that include representatives of the Central Government and State Governments and the All-India Council for Technical Education, have been set up for their management.

POST-GRADUATE STUDIES AND HIGHER TECHNOLOGICAL INSTITUTES

The key to national prosperity lies in the effective combination of men, technology, raw material and capital. Technology is more important than either raw material or capital, for the discovery and the use of new techniques can make up for deficiencies in natural resources and reduce the requirements of the capital. Organised post-graduate studies at institutions specially meant for the training of technologists are, therefore, a necessity.

An important step taken by the Central Government to develop facilities within the country for advanced technological training is to establish four higher technological institutions one in each region, east, west, south and north. A plan for the institutes was first drawn up in 1946 by a special committee under the chairmanship of the late Mr. N. R. Sarkar. The concept behind the institutes is that for the training of the highes possible grade of technologists, who are required in large numbers, national institutions provided with all the necessary resources and full freedom to adapt themselves to the fast changing situations, were necessary. In addition to the training of technical personnel, the institutions should be the fountain-heads of scientific and technical knowledge and should contribute through research and other activities to the industrial advancement of the country.

The Indian Institute of Technology, Kharagpur was the first higher technological institute to be established and started functioning in 1951. Well equipped and staffed, the Institute provides facilities for the education and training of over 1500 students in under-graduate courses, and 500 students for post-graduate courses and research work. The subjects offered cover a wide range, including Naval Architecture and Marine Engineering, Fuel and Combustion Engineering, Production Technology, Geophysics, Advanced Electrical Communication Engineering, Foundry Engineering, Concrete Technology, and are designed to meet the special requirements of industrial and other developmental projects for high grade technologists. This Institute has been incorporated by an Act of Parliament as an Institution of National Importance.

The other three higher technological institutes are in process of establishment at Bombay, Madras and Kanpur. The Bombay Institute started functioning in 1958 and Madras Institute in 1959, when admissions were made to first degree courses. The Kanpur Institute started in 1960. All these institutes are also being planned on the same comprehensive scale as the Kharagpur Institute and when completed will take the technological education of the country several steps further. Each will be a fully residential institution designed to promote corporate life among students and teachers, and will provide facilities for about 1500—2000 students in the under-graduate courses and for 500 students in post-graduate courses and research. While the nature and level of work of all the institutes is the same, each will pay particular attention to certain special fields of technology that are of importance to the industrial development of the country. Foreign assistance that these institutes are receiving is of great value. The Bombay Institute is being assisted by the Soviet

Union and the Madras Institute by West Germany. The assistance given by these countries comprises scientific and technical equipment, services of experts for a period of five years and facilities for the training of Indian teachers at universities and institutions in the Soviet Union and West Germany. Similarly, the Kanpur Institute is expected to receive assistance from the U.S.A. The Kharagpur Institute has received assistance from many countries through Unesco, and under the Colombo Plan, Point-Four Programme etc. All the higher technological institutes, therefore, represent a venture in international cooperation and understanding in scientific and technological fields.

Another important centre of post-graduate studies in engineering is the Indian Institute of Science, Bangalore. Established in 1911, the Institute has built up a high reputation in scientific research. In the last ten years, the Institute has become a centre of advanced technology with particular reference to Power Engineering, Aeronautical Engineering, Metallurgy, Internal Combustion Engineering and Electrical Communication Engineering. The Power Engineering Department of the Institute is the only one of its kind in the country and provides facilities for advanced training and research in the various aspects of electrical power generation, transmission and distribution. Similarly, the Aeronautical Engineering Department is the only centre for advanced training and research in aeronautics and related fields. The Department has research, design and testing facilities that are of great value to the aircraft industry. The other subjects offered by the Institute include Soil Mechanics and Foundation Engineering, Automobile Engineering, Industrial Engineering and Foundry Engineering. The Institute provides facilities for over 400 post-graduate students and research scholars.

In an expanding system of education, institutions should have a capacity for growth that has the essential quality of maturity; to project themselves into the future and anticipate changes; to prepare their products to meet the challenge of new situations. On the recommendations of the A.I.C.T.E., a deliberate policy has been adopted to encourage as many institutions as possible, depending upon their resources and abilities, to conduct advanced courses in engineering or to establish research units. A number of institutions, as for instance, Bengal Engineering College, Sibpur, Roorkee University, Guindy Engineering College, Madras, Poona Engineering College etc., that were till recently engaged only in under-graduate work are now offering facilities for advanced studies in engineering. The fields of study include Dam Construction and Irrigational Engineering, Structural Engineering and Concrete Technology, Public Health Engineering, Electrical Machine Design, Mechanical Engineering, Metallurgy and Electronics.

FACILITIES FOR STUDY IN SPECIAL SUBJECTS

One of the most important aspects of technical education is the diversification of the field of training. As industrial development progresses, it creates a need for personnel trained in different fields and possessing diverse skills. It is, therefore, a primary function of technical education to respond continually to new developments in science and technology, identify new technical disciplines and provide training facilities in them. In India, the full impact of scientific and technological advances on technical education has yet to come. Nevertheless, a marked diversification of the field of training is noticeable and new facilities are being added in institutions whose activities were till recently restricted.

Among the facilities created for training in special fields may be mentioned the School of Town and Country Planning, Delhi. The school has been established as a central institution for the post-graduate training of architects, engineers and sociologists in civic design and planning, an activity of great importance to the country. The school also conducts a special course in Housing to provide the much needed personnel for the housing projects undertaken by the Central and State Governments. A department of Architecture is proposed to be added to the school, that will conduct a full-fledged degree course in the subject.

On the recommendations of the Board of Management Studies, specialised courses in Business Management have been organised at four selected centres in the country and in Industrial Administration at three centres. The courses are essentially for persons who are engaged in Management and have to be equipped suitably so that they may become better managers, and for those who possess a minimum amount of practical experience and wish to enter the management field. The Administrative Staff College, Hyderabad that was established in 1957 as a joint and cooperative enterprise of the Central Government and private industry and commerce, offers a three-month course to young administrators from all walks of national life in the principles and techniques of organisation, administration and leadership in civil life.

Technical education and training at secondary level is of special importance. Designed specifically for students who wish to enter industry and other technical occupations, the junior technical schools offer a three-year integrated course in General Education, Technical Education and Technical Training in various engineering trades. The junior technical schools in India are being established.

PRACTICAL TRAINING FOR GRADUATES AND DIPLOMA HOLDERS

The practical work done by students of technical institutions is an integral part of their training in becoming engineers and an important pre-requisite to successful technical studies. Prior to 1949 organised apprenticeship facilities for graduates and diploma holders were available in industry or government departments on an extremely limited scale. Everywhere such facilities were provided by the organisations at the specific request of the candidates or of their institutions, and training was generally not supervised; nor were the trainees paid a stipend. The Scientific Manpower Committee that examined the matter from the standpoint of supply of trained technical manpower for various development projects recommended that the Central Government should assume a primary responsibility for arranging practical training of graduates and diploma holders. The Central Government accepted the recommendation and in 1949 formulated a scheme of Practical Training Stipends and initiated it. Under the scheme, during training a graduate is paid a stipend of Rs. 150 p.m. and a diploma holder Rs. 100 p.m. to enable them to meet expenditure on board and lodging.

Nearly 2,000 training places are secured every year in industry and other organisations.

In our present economic position, many deserving students in indigent circumstances are either unable to continue their technical studies or do so with extreme difficulty. State aid to them in the form of scholarships, stipends, etc., is necessary. Till 1959, the number of scholarships and stipends available at a majority of our technical institutions was extremely small. In order to improve the position, the Central Government in 1959 formulated and implemented a scheme of "Merit-*cum*-Means Scholarships" for students of all technical institutions. Under the scheme, 1,040 scholarships have been instituted for students in the degree and diploma courses. Each scholarship is tenable for the full course of studies of the student concerned and is of the value of Rs. 75 p.m. for degree students and Rs. 50 p.m. for diploma students. The scholarship holders are either exempted from tuition fees by their own institutions or have their scholarships increased by an amount equal to the fees payable to them.

So far as post-graduate studies and research are concerned, the position is more satisfactory. From the outset the A.I.C.T.E. insisted that at least 50% of the places in post-graduate courses should carry scholarships of the value of Rs. 150 p.m. This was accepted by the Central Government and a provision was accordingly made at all centres of post-graduate studies. After a further review of the matter, the All-India Council recommended recently that all places should carry scholarships and the value of the scholarships should be increased to Rs. 250 p.m. in view of the high cost of education at this level. As a result, nearly 500 scholarships of a reasonably good value are or will shortly be available for post-graduate studies in various branches of technology.

On the recommendations of the Scientific Manpower Committee, the Central Government in 1949 implemented a scheme of Research Training Scholarships to encourage bright young students to do research in basic sciences after M.Sc. or in technology after graduation in that field at universities and other educational centres. Nearly 800 scholarships have been instituted so far. Each scholarship is of the value of Rs. 200 p.m. and is tenable for a period of three years for an individual scholar. In adition, 80 National Research Fellowships of the value of Rs. 400 p.m. each have been created for advanced research at post-doctoral level.

FINANCING TECHNICAL EDUCATION

The expenditure on technical education reflects not only the progress achieved in the field, but also the organisational structure. With the growth of the initiative of the Central Government in the development of technical education, funds were provided in an increasing measure every year not only for its own institutions but to State Governments and private institutions. Today the finances for technical education, as a whole, are derived mainly from three sources *viz.,* the Central Government, State Governments and private agencies. During the first Plan period the Centre provided about Rs. 16.33 crores for technical education. A sum of Rs. 40.1 crores was provided for the second Five Year Plan; so far as the States are concerned, the outlay during the first Plan was of the order of Rs. 7.0 crores. In the second Plan they were expected to spend about Rs. 26·66 crores, exclusive of the assistance received from the Centre. Exact figures of the expenditure incurred by private agencies are not readily available, but it is estimated that this sector has contributed on an average Rs. 40-45 lakhs per year in the last three to four years.

The importance of technical education is further exemplified by the fact that a much larger outlay is proposed in the third Five Year Plan. According to the present estimates, an amount of about Rs. 176 crores is required for the expansion of technical education at all levels, as recommended by the Planning Commission.

FOREIGN ASSISTANCE

The aid that has been given by many countries generously and in a spirit of cooperation comprises scientific and technical equipment, the services of experts in various branches of technology and facilities for the training of teachers of Indian institutions abroad.

The extent of foreign aid provided or promised for technical education in India is given in the following table.

Aid Programme/Country	Technical Aid Promised or Received up to 1960		
	No. of experts	Value of equipment (Rs. in lakhs)	No. of fellowships for training of Indian staff
T.C.M. of the U.S.A. . . .	88	163·27*	106
Colombo Plan	37	52·08	24
UNESCO and UNTAA . .	18	13·47	30
U.S.S.R. Aid for Indian Institute of Technology, Bombay under UNESCO Programme . .	18	166·80	20
U.S.S.R. (for I.I.T. Bombay)	..	36·00	..
West Germany . . .	24	170·00	20
TOTAL	185	601·62	200

*Exclusive of aid of Rs. 105·7 lakhs provided by the U.S.A. out of the Rupee Fund for I.I.T. Kanpur for buildings and indigenous equipment.

In addition, over 6,500 Indian teachers have been sent abroad under various other Programmes.

SCHOLARSHIPS FOR SCIENCES, TECHNOLOGY AND THE FINE ARTS

The Indian Constitution and the proclamation of India as a democratic socialistic state place the case for a widespread network of scholarships beyond dispute. The underlying principle in the allocation of scholarships to groups and individuals is the principle of democratisation. This has all too often been taken to mean that scholarships will be awarded to the poor, irrespective of talent. On the assumption, now generally accepted, that a nation cannot survive, part slave, part free, there is clearly a case for a steady stream of scholarships to backward classes and communities who have to catch up with more advanced classes and communities. Nevertheless, the concept of democratisation through scholarships is not completely met by the regular award of scholarships to backward classes and communities. The democratisation of education through scholarships is based on a principle of equity. And equity demands that scholarships will be awarded on merit to those who, for want of opportunity, are not able to do justice to their own proven potentialities or effectively, with such talents, to serve their country.

Since the inception of the Ministry, scholarships and fellowships have been administered under the following schemes for post-graduate studies abroad and at home in scientific and technological subjects and the fine arts. Nearly 480 scholars have been sent abroad by the Ministry of S. R. and C. A. between 1958 and 1960 for advanced research on subjects like Nuclear Physics, Electro-Chemistry, Radio-Chemistry, Pharmaceuticals, Geophysics, Geology, Metallurgy, Electronics, Radio-Astronomy, Oil Technology, Hydraulics, Heat Power Engineering, Agriculture, Veterinary Science etc., to countries such as the U.S.A., the U.K., the U.S.S.R., West Germany, Czechoslovakia, France and so on.

CENTRAL OVERSEAS SCHOLARSHIPS SCHEME

The scheme is meant for universities, colleges and comparable institutions of higher education to afford opportunities to teachers for higher studies abroad and to raise the standard of instruction and research in India. The number of scholarships administered under the scheme is 28.

During 1958, a total of 18 scholars (U. K. 13, U.S.A. 4 and West Germany 1) were sent abroad for higher education under the scheme.

The scheme was not in operation in 1959 and 1960 owing to shortage of foreign exchange.

UNION TERRITORIES OVERSEAS SCHOLARSHIPS SCHEME

The scheme is meant for studies abroad in any country where excellent facilities are available for persons who by birth or domicile belong to the Union Territories of Manipur, Tripura, the Andaman and Nicobar Islands, Delhi, Himachal Pradesh, the Laccadive, Minicoy and Amindivi Islands, and Pondicherry. Four scholarships are given, of which two are reserved for candidates for Territories other than Delhi. (If suitable candidates are not forthcoming from them, the scholarships are considered open.)

Five scholars were sent abroad under the scheme as follows.

	1958-59	1959-60
U. K.	2	..
U. S. A.	1	2

GOVERNMENT OF INDIA SCHOLARSHIPS IN MUSEOLOGY

These scholarships were instituted with a view to increasing the supply of suitably trained museum personnel and to equip them with a knowledge of the latest organisational methods and techniques. The number of scholarships was two. One scholar each was sent to the U.K. and the U.S.A. This scheme has now been discontinued.

INDO-GERMAN INDUSTRIAL COOPERATION SCHEME

This is a biennial scheme and includes scholarships, free studentships and apprenticeships for the Indian nationals for study in West Germany and fellowships for German nationals for post-graduate study in India. The scheme was initiated in 1952-53 and was included in the second Five Year Plan. The number of scholarships and fellowships awarded under this scheme since its inception, is given below.

	1952-53	1954-55	1956-57
(a) Scholarships to Indian nationals for study/training in West Germany			
(i) For post-graduate study for two years' duration.	43	15	23
(ii) For practical training for a period of six months to one year.	64	53	79
(b) Fellowships to German nationals for study in India for a period of two years.	10	10	10
	allotted to two(including Ministry of Education)		

FOREIGN AWARDS BY GOVERNMENTS AND INSTITUTIONS

The Ministry receives offers of scholarships from various foreign governments to promote cultural relations with India. The following foreign countries have made offers of scholarships. The number of Indian scholars sent during the years 1958, 1959 and 1960 to different countries is shown below.

	1958	1959	1960	Total
Austria	2	..	..	2
Australia	..	..	1	1
Belgium	..	1	1	2
Czechoslovakia	..	22	1	23
Denmark	..	1	..	1
France	18	16	15	49
Hungary	..	5	..	5
Israel	1	..	..	1
Italy	1	25	..	26
Japan	3	1	2	6
Netherlands	..	5	..	5
Rumania	..	5	..	5
Spain	..	1	..	1
Sweden	1	..	..	1
Switzerland	2	..	2	4
U.A.R.	..	2	..	2
U.S.S.R.	11	20	5	36
Yugoslavia	..	5	..	5

UNESCO FELLOWSHIP OFFER BY THE GOVERNMENT OF POLAND

India utilised two of the ten fellowships placed at its disposal by the Government of Poland under Unesco sponsorship for special studies in scientific fields during 1958.

UNESCO SCHOLARSHIPS OFFER FROM THE CZECHOSLOVAK COMMISSION FOR COOPERATION WITH UNESCO

The scheme is a part of the Czechoslovak participation in the Unesco Major Project on Mutual Appreciation of Eastern and Western Cultural Values. The number of scholarships for Indian nationals is one only.

AD HOC SCHOLARSHIPS OFFERED BY THE GOVERNMENT OF THE FEDERAL REPUBLIC OF GERMANY AND THE GERMAN ACADEMIC EXCHANGE SERVICE (DAAD) TO INDIAN NATIONALS FOR POST-GRADUATE STUDY IN WEST GERMANY

The Government of the Federal Republic of Germany/German Academic Exchange Service (DAAD), as a gesture of goodwill, have been offering *ad hoc* scholarships of one year's duration to Indian nationals for post-graduate study in West Germany since 1954-55. The number of scholarships awarded so far, is given below.

Year	No. of scholarships awarded
1954-55	3
1955-56	4
1956-57	5
1957-58	4
1958-59	13
1959-60	7
1960-61	21 (offered in West Germany).

SCHOLARSHIPS OFFERED BY THE GOVERNMENT OF FEDERAL REPUBLIC OF GERMANY/WEST GERMAN ORGANISATIONS DURING THE PRIME MINISTER'S VISIT TO WEST GERMANY

During the Prime Minister's visit to Bonn (West Germany) in July 1956, the Government of the Federal Republic of Germany (West Germany) and various other authorities in that Republic offered scholarships to Indian nationals for study in West Germany. Scholarships were awarded to Indian nationals as shown below.

(a) Fifty scholarships of two years' duration offered by the Government of Federal Republic of Germany for post-graduate study in West Germany for engineering and technical teachers and teachers in humanities and basic sciences—1957-58.

All the fifty scholarships have been utilised.

(b) Two scholarships of two years' duration offered by the Hamburg University Students Union for post-graduate study in West Germany—1957-58.

These scholarships have been utilised.

(c) Ten scholarships offered by the Free Hanseatic City of Hamburg for post-graduate study and research in Medicine, Biology, Chemistry, Geology, Geophysics, Nutrition Chemistry, Mathematics, Meteorology, Occeanography, Physics and Indology, in West Germany—1957-58.

Nine scholarships have been utilised.

(d) One hundred scholarships offered by the Hamburg Chamber of Commerce, for practical training in West Germany—1957-58.

Ninety-eight scholarships have been utilised.

(e) Scholarships offered by the North Rhine Westphalia State Government, Federal Republic of Germany—1957-58.

Offer of 600 scholarships for practical training in industries offered by the North Rhine Westphalia for 1957-58, was withdrawn. In its place the Government of the Federal Republic of Germany offered in 1958-59, 150 scholarships for practical training in Engineering and Technology. These scholarships were converted into :

(i) Fifty scholarships of one year's duration offered by the Government Federal Republic of Germany for practical training in West Germany—1959-60. and

(ii) Fifty scholarships of two years' duration offered by the Government of Federal Republic of Germany for practical training in West Germany—1959-60.

All 50 scholarships under (i) have been utilised. As regards (ii), 45 scholars have already left for West Germany and the remaining five will be going shortly.

SCHOLARSHIPS OFFERED BY THE GOVERNMENT OF DEMOCRATIC REPUBLIC OF GERMANY (EAST GERMANY)

(a) Fifty scholarships for post-graduate study for engineering/technological teachers offered by the Government of East Germany—1957-58. All the fifty scholarships have been utilised.

(b) Thirty scholarships for post-graduate studies in Engineering, Technology and Medicine for 1959-60. Of these 28 scholarships have so far been utilised.

T. C. M. TEACHER TRAINING PROGRAMME

The Government of India have been greatly concerned about the shortage of teachers in the engineering and technological institutions in the country. To add to the pool of young teachers, the Ministry of S. R. and C. A. sent in 1958 under the T.C.M. Teachers' Training Programme 59 graduates in Engineering and Technology for various post-graduate courses in the universities and institutions of the United States of America.

Encouraged by this experience, the Ministry secured a large number of places in the year 1959 and sent another batch of 145 teachers abroad under the Programme.

For 1960, 60 teachers were selected. Of these, 51 have already left for the U. S. A.

The teachers sent for training under the Programme are required to execute a bond with the Government of India that on completion of their training, they will serve as teachers in technical or engineering institutions designated by the Government for a minimum period of at least three years.

TECHNICAL COOPERATION SCHEME OF THE COLOMBO PLAN (Foreign students coming to India for studies)

This scheme is co-ordinated by the Ministry of Finance (Department of Economic Affairs). The Government of India award scholarships to the countries who are participants in the Colombo Plan for training in India, mainly in scientific and technical subjects. There is no stated limit to the number of scholarships for individual countries. As far as possible, the Government try to meet the entire requirements of foreign governments.

The following are the countries to which scholarships are offered under the scheme.

Australia, Burma, Cambodia, Ceylon, Canada, Vietnam, Indonesia, Loas, Japan, Malaya, Nepal, New Zealand, Pakistan, Phillipines, Singapore, Thailand, U.K. and U.S.A.

The period of a scholarship or fellowship depends upon the duration of the course for which a scholar comes for training.

As far as this Ministry is concerned, 186 scholars are studying in India at present and about 70 scholars are expected to arrive shortly.

COLOMBO PLAN CORRESPONDENCE SCHOLARSHIPS OFFERED BY COMMONWEALTH OF AUSTRALIA

The scheme is co-ordinated by the Ministry of Finance (Department of Economic Affairs). The object is to extend to the countries of South East Asia through correspondence training facilities of the type available at technical colleges in Australia. The Ministry of S. R. and C. A. is concerned with only two courses, *viz.*

(a) Teaching Methods for Technical Instructors, and

(b) Technical Teachers' Certificate Course.

Only those persons who are employed as teachers or instructors in polytechnics or technical centres under the Director General of Resettlement and Employment and whose candidature is sponsored by their employers are eligible to apply.

The training colleges in Australia send direct instructional material by post to the selected candidates. At the conclusion of the course, which is normally of a year's duration, an examination is held in India and successful candidates are awarded certificates.

COMMONWEALTH SCHOLARSHIPS AND FELLOWSHIPS PLAN 1960

Under the Commonwealth Scholarships and Fellowships Plan, various governments within the Commonwealth offer fellowships and scholarships for post-graduate study, tenable in their countries to men and women from other parts of the Commonwealth. The scholarships aim at providing opportunities for Commonwealth students to pursue advanced courses or undertake research. They are intended for young persons of high intellectual promise who may be expected to make a significant contribution to life in their own countries on their return from studies abroad.

The Plan will operate for five consecutive years in the first instance, beginning from the academic year 1960-61. Following scholarships were offered to Indian nationals for 1960-61.

(a) Forty scholarships offered by the Government of the United Kingdom for post-graduate study or research in

Science, Humanities, Engineering, Technology and the Fine Arts. The selected candidates for these scholarships have left for the United Kingdom.

(b) Fourteen scholarships offered by the Government of Canada for study or research in Canada in Science, Social Sciences, Archaeology, Business Administration, Engineering and Medicine—1960-61. The selected candidates for these scholarships have left for Canada.

(c) One fellowship offered by the Government of New Zealand to an outstanding Indian historian for teaching Ancient Indian History and Culture at the University of Wellington. The fellowship has been utilised.

(d) Three (provisional) scholarships offered by the Government of Australia for study in the Basic Sciences, Medicine, Engineering and Humanities. Seven candidates have been nominated. Decision regarding the final selections is awaited.

(e) Two (provisional) scholarships offered by the Government of New Zealand for study in New Zealand in the Basic Sciences, Medicine, Engineering and Humanities. Five candidates have been nominated. Decision regarding the final selection is awaited.

(f) Two (provisional) scholarships offered by the Government of Malaya for study in the Basic Sciences, Medicine and Humanities. Three candidates have been nominated. Decision regarding the final selection is awaited.

(g) Two nominations invited by the Government of Hong Kong for advanced study in the Chinese language. Two candidates were nominated, but neither of them has been selected.

(h) Two scholarships offered by the Governments of Uganda, Tanganyika and Kenya for advanced studies in Medicine, Agriculture and the Humanities. No nominations will be made for these scholarships.

FOREIGN ORGANISATIONS OFFER SCHOLARSHIPS

Hawker-Siddeley Industries Commonwealth Scholarships. The scheme provides for the study of the products and methods of production of the Hawker-Siddeley Industries and aims at widening the scope of the engineering profession and strengthening the relationship existing between the U.K. and the Commonwealth countries. During 1956, 1957 and 1958, three scholars were sent *i.e.,* one during each year. It was proposed to send one during 1960. The scholarship is of two years' duration.

Science Research Scholarship of the Royal Commission for the Exhibition of 1851 *and Rutherford Scholarships.* The scholarships are intended to enable the students who have already completed a full university course and given evidence of capacity for scientific investigation to devote themselves to research work under conditions likely to equip them for practical service in the scientific life of the Commonwealth. The number of scholars sent abroad during the last three years is given below.

1957 .. 2 (One for Exhibition of 1851 scholarship and one for Rutherford scholarship)

1958 .. 1 For Exhibition of 1851 scholarship.

1959 .. 1 ....do.........

1960 .. 1 ....do.........

Each scholarship is tenable ordinarily for two years.

Canada Council Non-Resident Fellowships. The object of the scheme is to take advantage of facilities made available by the Canada Council for post-graduate study and research in Canada. The number of fellowships is 75 to be awarded to the nationals of all countries of the world, including India. The duration of each fellowship is one academic year with possibility of renewal for a second year.

Federation of British Industries Overseas Scholarships. The Federation of British Industries offered six scholarships for Indian nationals for practical training in Engineering in the U.K. for the year 1960. The duration of the scholarships is from six to nine months. Only those candidates who are recommended by their employers are considered for these awards. Scholars have also to contribute £ 100 per annum towards their maintenance allowance. Under the scheme, six scholars were sent to the U.K. in 1958-59.

International Association for the Exchange of Students for Technical Experience. India is a member of the International Association for the Exchange of Students for Technical Experience and as such receives offers of practical training facilities from member countries and offers the same to them. Selected candidates under the scheme are paid a reasonable remuneration that varies from country to country and firm to firm during the period of their training. As regards the offers received by India the short-term offers have been utilised for Indian students by the High Commission of India in the United Kingdom at London. The work pertaining to long-term offers has also since been entrusted to the High Commission to be utilised for selected candidates from amongst the Indian students already studying in the U.K. or on the Continent. Offers received from the U.S.A. have also been utilised from amongst the Indian students already studying in America.

The number of scholars sent to various countries since 1958 is given below.

	1958	1959	1960	Total
Germany	2	4	5*	11
Austria, Sweden and Germany	1	..	..	1
Finland	..	1	1	2
Netherlands	2	..	1	3
Sweden	..	1	2	3
U.S.A.	1	..	..	1
Denmark	..	..	4	4
France	..	..	1	1
Poland	..	..	1	1
Switzerland	..	..	2	2
Turkey	..	..	1	1
Yugoslavia	..	..	2	2

*No student was sent direct from India.

Information regarding the number of students nominated for practical experience in the U.S.A. is not available.

India received two scholars from Germany under the scheme, one in 1959 and one in 1960.

EXCHANGE AND RECIPROCAL PROGRAMMES

Exchange Programme of Scholars between India and Yugoslavia. To promote cultural relations between India and Yugoslavia, it has been decided to send five Indian scholars to Yugoslavia for training in ship-building, machine-building and electrical industries in exchange for five Yugoslav scholars coming to India for training. The Government of Yugoslavia will pay for the maintenance of Indian scholars in Yugoslavia and the Government of India will pay for maintenance, fees, etc. for the Yugoslavian scholars.

Reciprocal Scholarships Scheme. Under this scheme scholarships are awarded to nationals of those countries that award scholarships to Indian nationals, but countries that are covered under other scholarship schemes operated by the Government of India (except Exchange Programmes) are generally not included under this scheme. The scholarships under the scheme are offered every other year.

Under the 1958-59 scheme, 20 scholarships were offered to Austria, Czechoslovakia, East Germany, Italy, Netherlands, Norway, Rumania, Sweden, Switzerland, the U.S.S.R. and Yugoslavia. Twelve scholars (including two each from the U.S.S.R. and Rumania) from various countries were awarded scholarships under the scheme. Two scholars each from the U.S.S.R. and Rumania were transferred to the Ministry of Education as their subjects of study were the concern of that Ministry. The scheme for 1960-61 is under consideration.

Government of India French Followships Scheme, 1960-62. The object of the scheme is to promote cultural relations between India and France through educational contacts. Under the scheme, two fellowships have been awarded to French nationals. The fellowships are tenable for two years, unless terminated earlier. Each selected scholar is required to teach French language and literature for at least four hours a week at the institution where he is placed, in addition to his own studies and research work. The Government of India is responsible for fifty per cent of the fellowship allowance (including passage cost) of each scholar and the institution concerned bears the remaining 50 per cent.

Partial Financial Assistance Scheme. Under this scheme requests for the grant of interest-bearing refundable loans from private students going abroad for advanced studies are considered. The subjects of study falling within the jurisdiction of this Ministry are scientific, medical and technological subjects, fine arts and indology.

The total number of scholars who come within the purview of the Ministry of S. R. and C. A. and who are at present abroad is 362. During the last three years, 49 scholars have returned home on completion of their studies in different countries. Only two of the scholars declined to return to India in view of brighter employment prospects and positions offered to them abroad. Two scholars on return to India expressed dissatisfaction with their employment position and the work entrusted to them. These figures are only tentative as there is no regular machinery at present for evaluating the work of Indian scholars while abroad and the work done by them on return to India.

During the last two years the Ministry has introduced a number of new subjects for Indian scholars, depending on India's needs and the facilities for specialisation offered by the countries concerned. Among the new subjects so introduced may be mentioned Museology, Museum Objects, Maintenance Techniques, Museum Photography and Restoration of Paintings.

Scholarships to Young Workers in Different Cultural Fields. With the object of encouraging young persons of outstanding promise in various cultural fields such as the fine arts, music, dance, drama, etc., the Government of India instituted this scheme in 1953. The scheme seeks to encourage the development of artistic talent among the young and the promising in India.

The number of scholarships under the scheme does not exceed 100 at any one time. No number is specified for any particular field.

Each scholar is paid Rs. 250 per month. This includes, in addition to the scholar's living expenses, his travelling, books, art material or other equipment and tuition or training charges, if any.

The scheme was included in the second Five Year Plan with a provision of Rs. 15 lakhs which was later reduced to Rs. 10 lakhs. During the first four years of the Plan period, 140 scholars were selected and a sum of Rs. 7·58 lakhs was spent on them.

During the fifth year of the Plan, 23 scholars were selected and sent abroad.

A sum of Rs. 16·95 lakhs (including Rs. 20,000 for advertisements) was proposed for the third Five Year Plan by the Cultural Working Group; but the Planning Commission at a meeting held in March 1960, recommended a reduction to Rs. 10·00 lakhs.

The number of scholarships at any given time during the second Plan period has in fact been less than 100, because some selected scholars always drop out for unforeseen reasons. Efforts are being made now to reduce the number of unutilised scholarships to a minimum. A reserve list is maintained from which candidates are selected for scholarships in case the scholars originally selected drop out. Moreover, extensions are granted for a third year in all deserving cases. To obtain extension, candidates are required to appear for a test performance to demonstrate their suitability.

CULTURAL DEVELOPMENTS IN INDIA SINCE INDEPENDENCE : A RETROSPECT

Few countries can boast of a more ancient, varied and richer culture than that of India. The culture of India is, perhaps, the oldest with an unbroken heritage encompassing over 2,500 years of recorded history. Supreme achievements in different fields of cultural and artistic expression have survived the vicissitudes of time. These ideas and activities present a rich synthesis of diverse strands and traditions. Unity in diversity is the keynote of Indian culture.

The phenomenal survival of the Indian culture is all the more astonishing because of its almost complete neglect over a period of nearly two centuries. The confusion accompanying the decay of the Mughal empire was not conducive to cultural development. The British regime was even less hospitable to such development. The British policy of neutralism in matters of religion was, understandably, extended to the field of culture because of the intimate association between the two. Moreover, Indian culture was confronted with the more aggressive Western civilisation, only too conscious of its social and moral superiority as a result of the renaissance and an advanced scientific outlook. Armed with political power, prestige and patronage, the Western culture did not find it difficult to dominate the malleable Indian mind. A new system of education was set up envisaging a planned substitution of the alien culture which could not but cause a complete alienation between the educated class and the ignorant masses. No wonder, as G.R. Garrett, an English historian, has remarked : "The last 150 years have proved the most disappointing and, in some ways, the most sterile in Indian History".

It must, however, be said to the credit of the British that they showed commendable foresight in some important fields of cultural activity. For instance, the Archaeological Survey of India was first set up as early as in 1861. With the arrival of Lord Curzon in 1899 as Governor-General, the Indian Archaeological Department was placed on a firm foundation with a comprehensive plan of work in the fields of exploration, excavation, research, epigraphy, publications and preservation of monuments. As a result of the many explorations and excavations carried out by the Department, knowledge of Buddhist architecture, art and iconography advanced enormously. And, with the momentous discovery of the Indus Valley civilisation in Sind and the Punjab, the frontiers of Archaeology of India were pushed back by 2,000 years.

Similarly, the present National Library in Calcutta owes its foundation to Lord Curzon who formed it in 1902 by the amalgamation of the Calcutta Public Library with the then Imperial Library which itself had been formed in 1891 by an integration of a number of departmental libraries of the Government of India. The new library was intended to be "a library of reference, a working place for students and a repository of materials for the future historians of India in which, as far as possible, every book written about India at any time can be seen and read".

It may also be mentioned that the Indian Museum and Victoria Memorial Hall in Calcutta were established and maintained by the Government of India though they were administered by their respective Boards of Trustees. In addition, small grants were given to a few cultural organisations.

PROBLEMS ON THE EVE OF INDEPENDENCE

Independence in August 1947, inevitably spurred the forces of freedom in all spheres of social and cultural life. There was a sudden awareness of a big void in the national life, covered with a veneer of the Western culture. The feeling deepened and the void widened with the sudden withdrawal of the princes from the political scene of the country. And, as feudalism flickered, the fate of Indian culture hung even more in the balance. There was a big vacuum to be filled.

On the other hand, there was a growing cultural consciousness among the common people. The struggle for freedom had awakened national pride in the country's rich cultural heritage. Democratic institutions set up after independence helped the common man to articulate his social and cultural aspirations. There was a resurgence of cultural activity calling for proper direction and guidance. The Central Government had, therefore, to assume direct responsibility for promoting art and culture in the country.

Urgent Priorities. At the same time, the nation was faced with problems of overwhelming magnitude in various walks of life. Besides, the urgent material and technological needs of the country, inevitably, claimed higher priorities. The call for cultural development seemed to be lost in the competing claims of more urgent requirements of food, industry and technology. Therefore, at the beginning there was a natural tendency to concentrate on the material needs of the country. It has, however, been increasingly realised that it would be short-sighted to neglect, in the process of material development, the priceless cultural heritage of the country. In fact, technological and material developments constitute a challenge that in adopting new modes of thinking and living, India does not lose the living link with the cultural traditions and achievements of the past. The setting up of a separate Ministry of Scientific Research and Cultural Affairs in 1958 provided a powerful impetus to programmes of cultural activity in the country.

DEVELOPMENTS SINCE INDEPENDENCE

Archaeology

Expansion. The Department of Archaeology has made considerable progress since independence. As a result of the integration of the former princely states with the Indian Union, the Department looked after over 4,000 monuments of national importance. In 1951, the Parliament passed an Act for the protection of the monuments of national importance all over the country. The Department also maintained 12 site museums and organised a number of exhibitions. An idea of the expansion of the Department can be had from the fact that its budget provision has increased from Rs. 1·86 million in 1946-47 to Rs. 12.2 million in 1960-61.

Explorations and Excavations. The main problem of Indian Archaeology, after independence, was a search for a Harappan site because all the known sites of this culture were lost to India after partition. Explorations and excavations were, therefore, carried out and sites of Harappan culture brought to light in the Bikaner Division on the Upper Sutlej in the Punjab. Excavations were also carried out at many other places all over the country—at Brahmagiri and Chandravalli in Mysore State; Sisupalgarh and Dhauli in Orissa; Hastinapur, Bahadarabad Jagatgram and Mathura in Uttar Pradesh, Rupar in the Punjab; Amrithamangalam, District Chingleput, in Madras; Lothal, District Ahmedabad; Prakash, District East Khandesh; Tamluk, District Midnapur; Kottura, District Vishakapatnam; Kotla Nihang, Maski and Ujjain, etc.

At the same time, efforts were made to bridge the gulf separating the Harappan culture and the early historical period and this resulted in the discovery of a new ceramic industry known as the Painted Grey Ware. The spread of the chalcolithic culture in Central India and Deccan was traced by excavations at a number of sites in these regions.

The Department also undertook a comprehensive excavation at Nagarjunakonda which is to be submerged as a result of an irrigation scheme.

Other Activities and Schemes. The results of some of the major excavations and explorations were published in a journal called "Ancient India" of which 15 volumes have so far been published from 1954-55 onwards. Important results in different branches of Archaeology are published by the Department in an yearly publication known as "Indian Archaeology—A Review".

In 1958, the Parliament passed the Ancient Monuments and Archaeological Sites and Remains Act, containing many provisions for the better preservation of protected monuments and archaeological excavations. In 1959, the Department started a School of Archaeology with a view to training young persons in Archaeology so that they may be adequately equipped for the profession.

The Department implemented several schemes during this period *i.e.,*—assessment of the importance of monuments, survey plans of monuments, copying of Ajanta paintings, survey of antiquities, historical notes on monuments and guide books on monuments, acquisition of land geochronological study, preparation of archaeological atlas, and setting up of libraries.

Museums

National Museum, New Delhi. There are perhaps few countries in the world which have more to show in cultural achievement and yet have done so little to display their rich relics as India. Museums are much neglected institutions in the country. Since independence, however, it has been increasingly realised that museums have a dynamic role to play not only in preserving art objects but also in reviving and strengthening the cultural consciousness of the common people as well as in improving their educational standards.

Pending the construction of a new building in Delhi, a beginning was made in August 1949 by setting up the National Museum in Rashtrapati Bhavan as a concrete expression of India's greatness in culture and art and also to serve as a model institution for the guidance of other museums in the country. The Museum started with two departments, *viz.,* Art and Archaeology.

The Museum has made rapid progress since its inception. A part of the art collection displayed at the exhibition of Indian Art and Archaeology held in London in 1947-48 was originally the nucleus for the National Museum. The collection has since been enormously enriched.

In 1957 a section for chemical preservation and restoration of art objects was formed. In 1960 two more departments were added—those for display and modelling. A Department of Anthropology is in the offing. A few art exhibitions were organised and a number of publications brought out. The publications included a guide book, four sets of picture postcards, a monograph on Orissa paintings and two collections of paintings—"Nayak—Nayika" and "Kangra Paintings of the Bhagavata Purana".

A new building was planned to be constructed in three phases at a total estimated cost of about Rs. 12 million. The first phase of the building was completed in June 1960 at a cost of about Rs. 8·6 million and the National Museum was inaugurated in its new premises at the crossing of Rajpath and Janpath roads in December 1960.

National Gallery of Modern Art. Immediately after the establishment of the National Museum, the need for the National Gallery of Modern Art engaged the attention of the Government of India. The Conference on Arts held in 1949 at Calcutta gave a further impetus to this idea by recommending the establishment of a National Gallery. The National Gallery of Modern Art was opened in March 1954 at Jaipur House in New Delhi.

The Gallery now possesses more than 3,000 art objects—paintings, sculptures and other objects of art relating to the period after 1857.

Salar Jung Museum and Library, Hyderabad. The Government of India soon realised that the establishment of one or two national museums in a huge country like India would not suffice. It was, therefore, decided that several national museums should be set up in various parts of the country to represent different regions of India. In pursuance of this policy the Ministry took over the Salar Jung Museum, Hyderabad in December 1958 to be reorganised and developed as a National Museum for the South.

The Museum was built out of the vast and valuable personal collections of art objects and manuscripts left by the late Nawab Salar Jung. It has nearly 25,000 art objects of varied nature, some of them outstanding pieces not to be found anywhere else in the world, displayed in 77 rooms.

The Salar Jung Library attached to the Museum has more than 50 thousand volumes of manuscripts and printed books in Arabic, Persian and Urdu. The Salar Jung Museum and Library are being reorganised on modern lines. A new building to house the Museum is in the planning stage.

The Indian Museum and Victoria Memorial Hall, Calcutta.. These two Museums are amongst the oldest institutions of their kind in the country and are administered by their respective Boards of Trustees. But they are maintained from the funds provided by the Central Government. Both are unique institutions of considerable historical importance and significance, possessing rich collections of art objects and manuscripts. The Government of India have, therefore, been taking a keen interest in their reorganisation and development on modern and scientific lines so that their rich cultural resources are properly preserved and displayed. Accordingly, apart from adequate maintenance grants, the Museums were given substantial financial assistance in connection with their plans for reorganisation and development under the second Plan. The objective is that these two important institutions should be properly developed so as to serve as National Museums for the East.

A six-storeyed fire-proof building estimated to cost Rs. 23 lakhs is under construction to house the inflammable spirit collection of the Zoological Survey of India and other sections of the Indian Museum, Calcutta.

ASSISTANCE TO CULTURAL ORGANISATIONS AND WRITERS

Building Grants to Cultural Organisations. One of the basic approaches of the Central Government to the question of promoting cultural development has been to encourage and strengthen existing voluntary organisations in the field of culture with suitable financial assistance. Accordingly, several schemes of grants-in-aid were instituted to enable voluntary organisations to fulfil their functions more effectively.

One of the urgent needs of voluntary organisations has always been for suitable accommodation for which they are generally not able to find sufficient funds. The Central Government, therefore, adopted a scheme under which building grants were given to recognised cultural organisations on the basis of 50 per cent of the estimated or actual cost not exceeding Rs. one lakh per institution or equal in amount to their public collections for the purpose, whichever is less.

Assistance for Building Open Air Theatres in the Country. Conference on community development held in 1958 recommended that a number of cultural centres in rural areas may be set up to provide entertainment and encouragement to local people and arts respectively. It was also recommended that such cultural centres should be equipped with open air theatres. Accordingly, the Ministry initiated a scheme under which Central financial assistance was extended to State Governments to enable each of them to set up about five open air theatres in rural areas every year. Non-recurring expenditure not exceeding Rs. 1,150 for each open air theatre is met by the Ministry. In areas where there is a heavy rainfall, the maximum aid per theatre may go up to Rs. 1,500.

Assistance to Theatres. With a view to encouraging more creative activity on the part of established theatre groups in the country, the Ministry announced a scheme under which financial assistance were offered to such organisations to enable them to produce new plays. Recognised theatre organisations, qualifying for Central financial assistance were given a grant of Rs. 7,500 each for the production of not more than two new plays in 1960-61.

Inter-State Exchange of Cultural Troupes. Emotional integration of people living in different parts of the country is one of the paramount needs of the new nation. As one of the means for promoting such integration, the Ministry started an interesting scheme under which State Governments were encouraged to organise exchange of dance and music troupes, so as to enable people, particularly in rural areas, to get glimpses of the wealth of diverse cultural traditions of the country as well as of their underlying unity. The Ministry paid travelling expenses of the selected troupes from one State to another and a grant not exceeding Rs. 500 for meeting pocket and unforeseen expenses of each member of a troupe. The reports received show that the scheme has been a success.

Assistance to Writers and Artists. There was for a long time, a need felt for some Central assistance to alleviate the suffering of distinguished writers and artists who, in their old age, had fallen into indigent circumstances. The Central Government therefore adopted a scheme under which a monthly allowance not exceeding Rs. 150 each was given to such writers and artists. In special cases lump sum grants were also made. The scheme has subsequently been extended to cover the cases of widows of writers and artists in receipt of such allowances.

NATIONAL AKADEMIES

Conference on Letters and Fine Arts. In addition to giving financial assistance to voluntary organisations, the Government of India also realised the imperative need of giving a more positive lead in the development of literature and arts in the country. Accordingly, separate conferences of distinguished persons representing letters, visual arts, dance, drama and music were held. In the light of the recommendations of these conferences, the Government of India established three National Akademies—Akademi of Dance, Drama and Music (Sangeet Natak Akademi), Akademi of Letters (Sahitya Akademi) and Akademi of Art (Lalit Kala Akademi). A new building to house the three National Akademies is under construction in New Delhi. The main part of the building known as Rabindra Bhavan was inaugurated in May 1961 in time for the Tagore Centenary celebrations.

Sangeet Natak Akademi. The Sangeet Natak Akademi was inaugurated in January 1953. The chief objective of the Akademi is to foster and develop Indian dance, drama (including films) and music, and to promote through them the cultural unity of the country. The Akademi also co-ordinates the activities of regional organisations, promotes research, sets up training institutions, sponsors festivals and seminars, and encourages cultural exchanges. It has accorded recognition to about 150 voluntary organisations and given grants to some of them. The Akademi also gives awards annually to eminent persons in the fields of dance, drama, films and music.

Lalit Kala Akademi. The Lalit Kala Akademi was inaugurated in August 1954. Its primary function is to encourage study and research in the fields of painting, sculpture, architecture and applied arts. It also co-ordinates the activities of regional or State Akademies, promotes cooperation among art associations, encourages exchange of ideas between various schools of art, publishes literature of art, exchange of personnel and art objects, and fosters national as well as international contacts through exhibitions. A significant annual programme of the Akademi is the holding of the national exhibitions of art. The Akademi has published a number of albums and picture postcards of Indian paintings and miniatures.

Sahitya Akademi. The Sahitya Akademi was inaugurated in March 1954. Its objective is to preserve the Indian heritage in letters and to stimulate, by awards and distinctions, new writing, original or in translation. The Akademi has a large and varied programme of publications, including a National Bibliography of Contemporary Works of Literary Merit in Indian languages, anthologies from contemporary writers, a standard work in English and Hindi on the history and development of modern Indian literature, critical editions of Kalidasa's works, anthology of Sanskrit literature and epics and *Puranas,* etc.

The Akademi also gives, annually, awards of Rs. 5,000 each for the most outstanding books in each of the major Indian languages.

2500th Buddha Jayanti. The year 1956 marked the 2500th anniversary of the Buddha's *Parinirvana* and the Government of India celebrated the unique occasion in a befitting manner. A number of cultural functions, including an exhibition on Buddhist art and a symposium on Buddism's contribution to art, letters and philosophy, were held in November and December 1956.

As permanent contribution to the celebrations, it was decided to construct an impressive commemorative monument in the midst of an extensive park at an estimated cost of about Rs. 43 lakhs. The monument and the park are both under construction.

Plans for Tagore Centenary Celebrations. Elaborate nation-wide plans were made to celebrate the Tagore Centenary falling in May 1961, reflecting the rich and unique diversity of the great poet's genius and his significant contributions to the various aspects of national development. The plans included organisation of a Tagore exhibition, publication of a selection of Tagore's writings in several volumes in different languages of the country by the Sahitya Akademi, publication of an anthology of 100 songs of Tagore by the Sangeet Natak Akademi, printing of an album of 40 reproductions of Tagore's paintings by the Lalit Kala Akademi and establishment of Chairs in some of the universities and theatres in all State capitals of the country.

Detailed plans for the celebration of the Centenary were also made in most of the foreign countries.

INDOLOGY AND INDIAN LANGUAGES

Institute of Indology. Revival of Indian culture naturally stepped up the demand for indological research in the country. An Indology Committee was set up which recommended, among other things, starting of an Institute of Indology to co-ordinate and supplement all the indological research being done in different government and private institutions including universities, etc. But the recommendation could not be implemented on account of financial stringency. Preliminary steps are, however, being taken to set up the Institute and it may start functioning from the beginning of the third Plan.

Publication of Rare Manuscripts. On one of the recommendations of the Indology committee, the Government of India decided to publish about 20 rare manuscripts of national importance, in Sanskrit, Prakrit, Arabic and Persian.

They also implemented two schemes for grant-in-aid to voluntary organisations to enable them to publish rare manuscripts and catalogues of manuscripts available with them. The Government of India also offered to voluntary organisations to get their old manuscripts treated scientifically to ensure their preservation for posterity.

Development of Modern Indian Languages. On account of the pre-eminence of the English language during the British regime, most Indian languages remained impoverished. The Constitution of India has laid down as a fundamental right that—"Any section of the citizens residing in the territory of India in any part thereof having a distinct language, script or culture of its own shall have the right to conserve the same". From this fundamental right flowed the obligation on the part of the Government of India to develop all Indian languages. This was considered all the more necessary because it was decided, after independence, to adopt these languages as media of instruction in schools and colleges. The Central Government, therefore, included in the second Plan a scheme of development of modern Indian languages except Hindi and Sanskrit for which separate provision was made. A provision of Rs. 2 million was made for the purpose in the second Plan.

Under the scheme, Central financial assistance was given to State Governments and voluntary organisations on the basis of 50 per cent of the estimated expenditure on proposals for publications intended to develop their respective languages, such as encyclopaedias, bilingual dictionaries of Indian languages, bibliographies, and books of knowledge on science, culture, scientific terminology and grammar, etc. Almost all the Plan provision for the scheme was utilised.

The Ministry are also preparing a one-volume encyclopaedia in English which will be translated into various Indian languages.

History of Freedom Movement in India. A Board of Editors (History of Freedom Movement) was set up in 1952 for the purpose. The Board collected considerable amount of relevant material running into 1,33,327 pages consisting of 2,890 items. On the dissolution of the Board at the end of three years, the work of another collection was entrusted to the National Archives of India. With the material now available, Dr. Tara Chand has been entrusted with the task of preparing the history. The first volume has been published. Two other volumes are under preparation.

A history of the Indian revolt of 1857 prepared by Dr. S. N. Sen at the request of the Government of India, was also brought out in 1957 to mark the occasion of the 100th anniversary of India's first struggle for freedom.

NATIONAL LIBRARIES AND GAZETTEERS

National Library, Calcutta. The Imperial Library in Calcutta has, since independence, been developed into a national library. The name was accordingly changed to National Library in 1948 and it was shifted from the Metcalfe Hall to its present spacious building and surroundings—Belvedere—in the same year. It was formally opened in its new premises in 1953.

The National Library has made substantial progress since independence. It has been reorganised into 11 divisions including those for preservation, publication and children's library. A significant measure of its development is the big increase in the number of its books from 4 lakhs in 1947-48 to 10 lakhs. An important feature of this development is the acquisition of a large number of books in each of the different Indian languages. Its budget provision has increased from Rs. 0.15 million in 1946-47 to Rs. 1.5 million in 1960-61.

A Bibliography and Reference Division has also been established in the Library with the primary responsibility of compiling the Bibliography of Indology covering all aspects of the cultural activities of the country. The first section of this project "Bibliography of Indian Anthropology" has been published.

Delivery of Books (Public Libraries) Act, 1954. In the year 1954, the Government of India enacted the Delivery of Books (Public Libraries) Act, 1954. Under the Act, the National Library, Calcutta, and three other public libraries designated by the Government were entitled to get a copy each of every book published in India. This Act was subsequently amended so that all the periodical publications in the country were also included within its purview. The other two libraries benefiting from this Act are—the Connemara Public Library, Madras and the Central Library, Town Hall, Bombay. The third library will be the Central Reference Library proposed to be set up in Delhi.

Central Reference Library. The Government of India formulated a scheme for setting up a Central Reference Library at Delhi under the second Five Year Plan at a cost of Rs. 50 lakhs to co-ordinate liaison work in the library world on a national basis. The scheme will be implemented when a new building, which is being planned, is put up.

One of the main objects of the proposed Library is to compile the Indian National Bibliography on the basis of the material collected under the Delivery of Books (Public Libraries) Act, 1954. A nucleus staff of the Central Reference Library was recruited for this purpose and started functioning at the National Library, Calcutta. The Bibliography, which is published quarterly in the Roman script, covers all Indian publications including the official publications. A number of issues has already come out. In addition to the quarterly issues, an annual issue is also being published. The volume for 1958 is out and that for 1959 is in the press. Arrangements have also been made for bringing out the language fascicules in all the language scripts of the country.

Gazetteers of India. The Imperial and District Gazetteers of India are reference works of inestimable value to the administrator, and an authoritative source of information to the general public. These were last revised in 1909 and are now hopelessly out of date.

The question of revising them has engaged the attention of the Government of India for a long time, but revision was not taken up earlier for want of funds. This was taken up at first by some of the State Governments on their own, Bombay in 1949, Bihar in 1952 and Madras in 1954. A few volumes were prepared, but those which were actually published before the Central Government entered the scene are the District Gazetteers of Gaya, Hazaribagh (Bihar), Poona, Dharwar (Bombay), Tanjore (Madras). The Government felt that the work should not be left entirely to the initiative of the State Governments, if we were to have District Gazetteers for all States, and basic uniformity in the preparation of the volumes.

In July 1955, an inter-departmental meeting of officers of the various Ministries of the Government of India and representatives of the State Governments was held to consider the question. On its advice, an expert committee was appointed to formulate a plan for the revision of both the Indian and District Gazetteers. This committee met in November 1955 and on its recommendations, the Government of India launched its programme of revision of the Imperial and District Gazetteers. For the Imperial Gazetteer of India (which is in 26 volumes), the first four volumes were to be revised and the work was to be the sole responsibility of the Central Government. The District Gazetteers' preparation and publication were to be solely the responsibility of the State Governments, but the Central Government would meet 40 per cent of the expenditure incurred by them subject to a total limit of Rs. 20 lakhs for all the States.

The Central Gazetteers Unit was set up in January 1958. A Central Advisory Board was constituted to advise on problems connected with the Gazetteers. The functions of the Central Gazetteers Unit are two-fold : (i) revision of the first four volumes of the Imperial Gazetteer of India as a Central scheme, and (ii) supervision and co-ordination of the work of the revision of District Gazetteers in the States.

The Central Advisory Board formulated the plan of the four India Volumes and submitted it for the approval of the Minister but this could not be finalised till a General Editor was appointed. The Central Advisory Board was reconstituted in August 1959 and the plan of the first volume and a list of contributors came up for consideration at its first meeting and were adopted. Experts of eminence like Dr. C. P. Ramaswamy Aiyar, Dr. S. K. Chatterji, Dr. D. N. Wadia etc., who are well-known authorities in their respective fields, were entrusted with the writing of chapters for the first volume.

The work on the first volume has been taken up and it is expected that it will be ready for the press by the end of 1961. A number of contributors to the volume have already been received but for the chapter on "population" it has been decided to await the final results of the census operations of 1961 so that an authoritative note can be added to Volume I. The work on the remaining volumes will be taken up at subsequent meetings of the Central Advisory Board.

State Gazetteer Units were set up in almost all the States by 1958 except in the Punjab and Jammu and Kashmir. The Gazetteer Organisation is being constituted in the Punjab where a State Editor and an Editor have been appointed recently. The scheme has been approved in principle by the Government of Jammu and Kashmir, but the State Unit has still to be organised.

The work is progressing smoothly and the District Gazetteers of Gaya, Hazaribagh, Muzaffarpur, Singbhum and Saran (Bihar), Poona and Dharwar (Bombay), Tanjore (Madras) and Lucknow (U.P.) have so far been published. In addition, many drafts (See Appendix at the end of this chapter) are under preparation and about 50 District Gazetteers were expected to be completed by the end of the second Five Year Plan. The remaining Distrit Gazetteers are expected to be published during the third Plan period.

The original provision of Rs. 25 lakhs made for the scheme was provisionally reduced to Rs. 10.5 lakhs in the second Plan. Out of this amount, an expenditure of Rs. 3,15,290 has so far been incurred which includes Rs. 1,22,298 on account of Central grant-in-aid so far given to the State Governments. A provision of Rs. 4,80,500 exists in the budget for the year 1960-61.

In view of the fact that the work was taken up as late as 1958, the scheme could not be completed during the second Plan and has had to be carried on as a spillover to the third Plan. It is expected that all the revised District Gazetteers as well as the four India Volumes will be brought out before the end of the third Plan period.

Copyright. At the time of independence, the law relating to copyright in India was regulated by the Copyright Act, 1911 as adapted by the Indian Copyright Act, 1914. In view of the Constitutional changes in the status of India, the

U.K. Copyright Act presented serious difficulties in its application to India and it was, therefore, considered necessary to enact an independent self-contained law relating to copyright. A new Copyright Act was, therefore, placed on the Statute Book in 1957. The law provides for the setting up of a Copyright office and a Copyright Board. The new Act came into force on January 21, 1958. India has also acceded to the Brussels Convention on Copyright and the Universal Copyright Convention.

Evaluation and Prospects

Main Features. The most striking feature of the development reviewed in this brief report is the marked increase both in the volume and the variety of cultural activities undertaken by the Central Government since independence. Three main approaches are perceptible. Every effort has been made to encourage and strengthen voluntary organisations in different fields of culture, giving them suitable financial assistance. In certain important fields where more positive guidance on an all-India scale was considered desirable or necessary, autonomous organisations were promoted with funds from the Central Government but with freedom to frame their own policies and programmes. Even in the fields of work where the Central Government is directly concerned, central advisory boards have been set up to advise the Government on policy matters. The significant trend is to secure expert and public opinion for governmental policies as far as possible.

As regards the contents of various cultural programmes, stress has been laid on such activities as express and promote the basic unity of Indian culture. Emphasis is also laid on the promotion of emotional integration among people in different parts of the country. No less significant is the attempt to give a rural bias to some of the cultural programmes so as to bridge the gulf between the rural and the urban population.

Need for National Policy. It will, perhaps, be too much to claim that the Central Government has been able to evolve a well-defined and comprehensive policy for the cultural development of the country. It is hardly possible to do so in such a short time. The present programmes have been planned mainly to meet certain immediate needs felt in the cultural field. At the same time, behind the surprising spurt of cultural activity since independence, can be discerned some of the lineaments of a comprehensive policy to be forged in the near future. It is too soon yet to attempt to assess the work of all the autonomous bodies set up for promoting cultural development. It may, however, be hoped that with time these new bodies will gather momentum as they gain fresh experience.

The achievement of the Government since independence can be more precisely measured by the great progress of expenditure on cultural activities on the part of the Central Government since independence. The following figures regarding even the few items dealt with by the Central Government before independence speak for themselves.

Subject	Budget provision for 1946-47 (Rs. in millions)	Budget provision for 1960-61 (Rs. in millions)
Archaeology	1·87	12·20
National Library	0·51	1·50
Indian Museum, Calcutta	0·05	0·18
Victoria Memorial Hall, Calcutta	0·10	0·30
Grants to Cultural Organisations	0·06	3·50

Since independence, 12 new cultural schemes have been implemented. The budget provision for 1960-61 for all the cultural activities of the Central Government, excluding those relating to external relations and scholarships amounted to Rs. 32·86 million as against the meagre budget provision of Rs. 2.32 million for similar activities in 1946-47.

Progress under the First and Second Plans. The scope of development is all the greater because of the long neglect of cultural affairs until independence. Even since independence, culture has not been receiving a fair deal, unavoidably though, because of the competing claims of more urgent problems and priorities. In the first Five Year Plan, five cultural schemes were projected but none of them could be implemented on account of financial stringency. It is actually during the second Plan period, and more so since the setting up of the present Ministry in 1958, that a noticeable progress in the implementation of seventeen cultural schemes has been made. For all cultural schemes of the Central as well as State Governments there was a Plan provision of about Rs. 4.63 crores only representing about 0.1 per cent of the total Plan provision of Rs. 4,500 crores. There is, therefore, a big leeway to make up if the cause of culture is to revive and come into its own.

Apart from lack of funds there were other factors which hampered the progress of cultural schemes in the second Plan—for instance, lack of experience, trained personnel, and foreign exchange, and late start in the implementation of some of them.

Prospects in the Third Plan. Some of these difficulties have been partly overcome. A more adequate financial provision for cultural activities has been proposed for the third Plan—about Rs. 11.5 crores for both the Central Government and the State Governments as against about Rs. 4·5 crores in the second Plan. In the third Plan emphasis will be laid on the consolidation of the schemes started and implemented in the second Plan. Essential extensions will be effected in each of these schemes. Some of them will, however, be developed considerably in view of their intrinsic importance. For instance, the schemes of development of modern Indian languages, reorganisation and development of museums, national libraries and gazetteers are expected to receive particular attention because of their special cultural significance as well as long neglect. Nineteen new schemes have been included in the third Plan.

CULTURAL RELATIONS WITH FOREIGN COUNTRIES

Prior to 1947, cultural activities were largely outside the purview of the State. Occasionally Indian literary men, scientists and humanists went abroad on cultural tours, but cultural relations were mainly confined to exchange with Great Britain and countries of the Commonwealth. For example, in 1947 an Indian art exhibition was sent to London. India had practically no cultural exchanges with other countries.

On attaining independence, the problem faced was not only of projecting India's cultural achievements in foreign countries but also of establishing closer cultural contacts with those countries.

After India attained independence, there arose a number of other more pressing problems and the work relating to cultural relations with foreign countries could not be initiated on a regular basis until 1950-51. The Government of India's cultural activities programme has, however, made considerable headway during these years. The importance given to and the progress made in this field may be observed from the fact that while in 1950-51 the budget provision earmarked for development and promotion of cultural contacts with foreign countries was one lakh of rupees, it has risen to Rs. 32 lakhs during 1960-61.

To meet the growing volume of cultural activities with foreign countries, a separate External Relations Division was created in 1956, that is now charged with the responsibility of planning and implementing the cultural activities programme of the Government of India with foreign countries in collaboration with the Ministry of External Affairs.

The cultural activities programme as it stands covers a wide field, the aim being to make our cultural heritage known to people of other countries, to develop a close understanding of one another's achievement in artistic, literary, cultural and other finer aspects of life and to promote mutual goodwill and understanding.

With this aim in view, India has entered into cultural agreements with 11 countries viz., Turkey, Iraq, Rumania, Japan, Indonesia, Iran, Poland, United Arab Republic, Czechoslovakia, the U.S.S.R. and Yugoslavia. These agreements provide for cultural, scientific and educational cooperation and collaboration between India and the respective countries.

India's cultural activities are, however, not restricted only to countries with whom India has cultural agreements but extend to all countries.

EXCHANGE OF DELEGATIONS

During the post-independence period, India sent cultural, sports and educational delegations to a number of foreign countries.

On the other hand, cultural and other delegations were invited from a number of countries.

Distinguished scholars like Prof. Arnold Toynbee and Dr. Kenneth Bradley from the United Kingdom, Mr. Hallador Laxness, noble laureate from Iceland, Dr. Isa Sipehbudhi from Teheran, Dr. Ahmad Sammans from Syria, Prof. Alfro Siqueiros from Mexico, Dr. Julius Germanus and Prof. Irvin Baktay from Hungary, Prof. Nguyen Khanh Toan, Vice-Minister of Education, Democratic Republic of Vietnam, Mr. R. A. Beijer, under joint sponsorship of Unesco and Government of India, from Stockholm, Prof. Hajime Nakamura and Prof. Masakiyo Miyamoto from Japan, Dr. Grayson Kirk, and Mr. and Mrs. Andor Foldes from America, Prof. and Mrs. Werthiem from the Netherlands, Mr. Chau Sathiene from Laos and Mr. Le-Van from the Republic of Vietnam and Dr. E. D. Vries from the Hague visited India. Indian scholars were also sent to various countries of the world.

INTERNATIONAL CONGRESSES AND FESTIVALS

India participated in various international congresses and festivals either by sending its delegations at government expense or assisting individuals/groups to participate on such occasions.

Special mention may be made of the following international congresses/festivals.

Seventh International Congress of Linguists held in London in September 1952.

Second Conference of World Fellowships of Buddhists held in Tokyo in 1952.

International Seminar on 'Education and the Problems of Daily Living' held in Paris in June-July 1954.

Inaugural Session of Pakistan Philosophical Congress held in Lahore, in April 1954, and subsequent sessions of Pakistan Philosophical Congress held in

Karachi in February 1955, in Peshawar in 1956, in Dacca in 1957.

Eleventh International Congress of Philosophy at Brussels in January 1955.

Pan-African Congress on Pre-History held in Livingston, North Rhodesia.

Third International Conference of Students of Architecture held in Paris in April 1955.

International Congress of Orientalists held in Paris in July 1948, in Istanbul in September 1951, in the United Kingdom in July 1954, in Munich in 1957, and in the U.S.S.R. in 1960.

Youth Congress held in New York in December 1950.

Indonesia Language Congress held in October-November 1954.

Regional Conference of the International Federation of University Women held in January 1955.

Third International Conference of University Professors of English held at Cambridge in 1956-57.

Edinburgh Festival held in the United Kingdom in 1956-57.

Two Hundred and Fiftieth Anniversary Celebrations of Technical University, Prague.

P. E. N. International Congress held at Tokyo, in 1957-58 and in Frankfurt in July 1959.

Two Thousand and Five Hundredth Buddha Jayanti Celebrations held in Thailand in 1957-58.

Jashan Celebrations in Afghanistan held annually in August since 1949.

Two Thousand Five Hundredth Buddha Jayanti Celebrations held in Cambodia in 1957-58.

Ninth International Congress for the History of Religions held in Tokyo in August-September 1958.

Gandhi Jayanti Celebrations, Independence Day and Republic Day Celebrations in Nepal for the last four years.

Theatre Des Nations Festival held at Paris in 1959 and 1960.

INDIA ART EXHIBITIONS

Indian art exhibitions were sent to a number of countries and India participated in international art exhibitions in the United Kingdom, Italy, Japan, Burma, British West Indies, Ireland, West Germany, Ceylon, Philippines, Australia, France and the United States of America. Special mention may be made of the "Five Thousand Years of Indian Art Exhibitions" which is still abroad and which has already been shown at Essen, Zurich, Paris and Vienna. This exhibition consists of 920 art objects from the time of *Mohenjodaro* to present times which have been lent by 30 museums and art galleries in the country. The exhibition has made a great impact on the minds of Europeans.

At the invitation of the Government of India, art exhibitions have also visited India mostly from European countries. India has also organised two Unesco travelling exhibitions of reproductions of Chinese art and Persian miniatures.

PRESENTATION OF BOOKS

Still other activities in the field of cultural contacts with foreign countries have been the exchange of books and library sets relating to the various aspects of Indian life, culture, history, language, literature, philosophy, religion etc. Books were presented to libraries, institutions, scholars etc. in various parts of the world.

Besides books, art objects, audio-visual material, children's equipment, radio sets, etc. were presented to institutions in some countries.

GRANTS

Ad hoc grants have been given to a number of Indo-foreign and other cultural and educational institutions both in foreign countries and in India.

Financial assistance to enable foreign students and scholars to prosecute their studies is also given in some special cases from cultural activities programme. Assistance is given to African students in India, not covered under the General Cultural Scholarships Scheme, to learn Hindi in their colleges.

SUBSIDY FOR TRANSLATION AND PUBLICATION OF INDIAN CLASSICS INTO FOREIGN LANGUAGES

To encourage the spread of knowledge about India, the Government has encouraged translation and publication of Indian classics and other books into foreign languages. The Government of India bought five manuscripts of the Arabic translation of the *Mahabharata, Gita, Nala Damayanti, Shakuntala* and Indian chronicles translated by Shri Wadi Boustani. The Government have assisted in the publication of Tagore's *Gitanjali* and *Fruit Gathering* in Arabic, *Meghdoot* in Nepalse, Pandit Jawaharlal Nehru's autobiography in Persian, and assisted institutions in Nepal in the translation and publication of Indian books.

RECRUITMENT OF TEACHERS FOR FOREIGN COUNTRIES

At the request of concerned foreign governments Indian teachers were recruited for service in Uganda, Afghanistan, the U.S.S.R., the United States of America, Gold Coast, Nepal, Mauritius, Ethiopia and Fiji.

PROMOTION OF EDUCATION ABROAD

Two endowment funds, one in Ceylon and the other in the British West Indies, were created with liberal grants from the Government of India.

Essay contests were organised in Australia and prizes given to students. Hindi centres were opened in British West Indies, British Guiana, Jamaica, Nairobi and prizes awarded to best students of Hindi. (These centres have, however, since been discontinued).

Prizes were also awarded to best students of Hindi and other Indian languages from Japan, Mongolia, China, the U.S.S.R., the United Kingdom, Poland and Czechoslovakia in the shape of a free round trip to India for a month and financial subsidy to a student from the United States of America.

REHABILITATION OF TIBETAN REFUGEES (STUDENTS AND LEARNED LAMAS)

Consequent on the recent disturbances in Tibet, a large number of Tibetan refugees came to India. This Ministry provided educational facilities to 160 students during 1959-60 and it is proposed to provide similar facilities to another 76 Tibetan refugee students.

Twenty-five scholarships of the value of Rs. 50 per month each have also been sanctioned to enable 25 Tibetan refugee lamas/students to prosecute under-graduate studies at the Sanskrit University, Varanasi, Nava Nalanda Mahavihara and the Namgyal Institute of Tibetology, Gangtok.

With a view to utilising the presence in India of learned Tibetan Lamas, ten fellowships of the value of Rs. 300 per month each have been sanctioned to enable universities/institutions in India to appoint suitable Lamas for research and teaching work. The Delhi University and the Sanskrit University, Varanasi have already appointed one Lama each and the Namgyal Institute of Tibetology, three Lamas.

To make available in India, education on the pattern available in the monasteries in Tibet, a School of Buddhist Philosophy was established at Leh in October 1959.

INTERNATIONAL STUDENTS' HOUSE, DELHI

A society named the International Students' House Society has been set up to put up an International Students' House at Delhi and administrative approval for its construction has been given.

INDIAN COUNCIL FOR CULTURAL RELATIONS

At the unofficial level, the cultural activities programme with foreign countries is looked after by the Indian Council for Cultural Relations, an autonomous body, set up in 1950. The Council is almost entirely financed by the Government of India and the Minister of Scientific Research and Cultural Affairs as its President guides the activities of the Council.

The Council has ten different sections representing different regions and aspects of its work, viz., (1) East Asia Section, (2) West Asia Section, (3) Africa Section, (4) Europe

Section, (5) West Asia Section, (6) America Section, (7) Carribean Area Section, (8) Persian Language and Cultural Section, (9) Students' Service Unit, (10) Publications Section and Library and Reading Room.

Sending Indian teachers to teach at foreign universities, inviting student-teacher parties and goodwill missions to India, arranging receptions for visiting foreign dignitaries from various parts of the world, presenting books, arranging exchange of students, sending Indian scholars abroad for research and cultural tours, encouraging pen-friendship, translating Indian classics into foreign language, supervising welfare of foreign students studying in India through social gatherings, holiday tours, seminars and rest and recreational camps, etc., publishing two quarterly journals on Indo-Asian culture and subsidising a third journal published by the Iran Society, are some of the more important activities of the Council.

The Council is also running International Students' House at Delhi and Calcutta in rented buildings and a students' Club at Madras.

AZAD BHAVAN

To enable the Indian Council for Cultural Relations to function suitably, it was decided to construct a building of its own. The first phase of the building has been completed and the Council has moved to its new premises.

EVALUATION AND DETAILS OF IMPORTANT PLANS UNDER IMPLEMENTATION

Some of the more important activities undertaken during this period is the project connected with the construction of India House at the Cite Universitaire, Paris, and financial assistance for the extension blocks to the Y.M.C.A. Indian Students' Union and Hostel, London.

The India House at the Cite Universitaire, Paris is estimated to cost about Rs. 35,00,000 in all and will provide accommodation to about 97 students when completed.

The London Hostel has been granted a sum of Rs. 4,00,000.

India has friendly relations with all the countries of the world and consequently there is a demand for more intimate cultural relations from almost all the countries of the world. Owing to limited funds, it has not been possible to meet all these demands. It has also been felt that the practice of collecting a few artistes from different parts of India at the last moment to form a composite delegation of dancers and musicians does not serve our purpose fully. It has, therefore, been proposed that there should be two troupes employed by the Government of India who will be under constant practice within the country and who could be sent to the different parts of the world at short notice.

We have also reached a stage when it has become necessary to review the work that has been done so far and in the light of our experience concentrate on those regions of the world where not much work has been done in the past. For the first time, therefore, a dance and music troupe is visiting the West Asian countries this year (1961) and for the first time also a troupe of artistes was sent to Latin American countries. This has been followed up by sending an exhibition of Indian paintings to these countries.

APPENDIX

Statement showing the progress made in the preparation and publication of District Gazetteers

Sl. No.	Name of State	Approved			Submitted for approval	Under preparation
		Published	In Press	Awaiting Publication		
1	Assam	..	..	..	..	Kamrup. Sibsagar.
2	Bihar	Champaran Gaya Hazaribagh Muzaffarpur Saran Singhbhum	Monghyr Palamau	..	..	Purnea.
3	Bombay	Poona Dharwar	Broach	..	Kolhapur Surat Ratnagiri	East Khandesh.
4	Kerala	..	..	..	Trivandrum	..
5	Madhya Pradesh	..	..	..	..	Gwalior. Khandwa.
6	Madras	Tanjore	Madurai	Coimbatore South Arcot	..	..
7	Mysore	..	Bijapur	South Kanara	Raichur	Chitaldurg.
8	Orissa	..	..	..	..	Koraput.
9	Rajasthan	..	..	Jhalawar	Barmer	..
10	Uttar Pradesh	Lucknow	..	Faizabad	Barabanki Sitapur	..
11	West Bengal	..	..	..	..	Burdwan. Malda. West Dinajpur.
	Union Territories—					
1	Delhi	..	..	..	..	Delhi.
2	L.M. and A. Islands	..	..	..	..	L.M. and A. Islands.
3	Manipur	..	..	..	..	Manipur.
4	Pondicherry	..	..	..	..	Pondicherry.
5	Tripura	..	..	..	..	Tripura.

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